

**THE U.S. FOREST SERVICE:
TAKING A CHAIN SAW TO SMALL BUSINESS**

HEARING
BEFORE THE
COMMITTEE ON SMALL BUSINESS
UNITED STATES SENATE
ONE HUNDRED SIXTH CONGRESS
SECOND SESSION
—
OCTOBER 4, 2000



Printed for the Committee on Small Business

—
U.S. GOVERNMENT PRINTING OFFICE

68-240 CC

WASHINGTON : 2001

For sale by the Superintendent of Documents, Congressional Office
U.S. Government Printing Office, Washington, DC 20402

COMMITTEE ON SMALL BUSINESS
ONE HUNDRED SIXTH CONGRESS

CHRISTOPHER S. BOND, Missouri, *Chairman*

CONRAD BURNS, Montana	JOHN F. KERRY, Massachusetts
ROBERT F. BENNETT, Utah	CARL LEVIN, Michigan
OLYMPIA J. SNOWE, Maine	TOM HARKIN, Iowa
MICHAEL ENZI, Wyoming	JOSEPH I. LIEBERMAN, Connecticut
PETER G. FITZGERALD, Illinois	PAUL D. WELLSTONE, Minnesota
MIKE CRAPO, Idaho	MAX CLELAND, Georgia
GEORGE V. VOINOVICH, Ohio	MARY LANDRIEU, Louisiana
SPENCER ABRAHAM, Michigan	JOHN EDWARDS, North Carolina
VACANCY	

EMILIA DiSANTO, *Staff Director*

PAUL COOKSEY, *Chief Counsel*

PATRICIA R. FORBES, *Democratic Staff Director and Chief Counsel*

C O N T E N T S

OPENING STATEMENTS

	Page
Enzi, The Honorable Michael B., a United States Senator from Wyoming	1
Crapo, The Honorable Michael D., a United States Senator from Idaho	9
Burns, The Honorable Conrad, a United States Senator from Montana	20

WITNESS TESTIMONY

Thomas, The Honorable Craig, a United States Senator from Wyoming	24
Craig, The Honorable Larry, a United States Senator from Idaho	26
Hurst, Jim, President, Owens & Hurst Lumber, Co., Inc., Eureka, Montana ...	28
Bousman, Joel E., Cattle Rancher, Boulder, Wyoming, and Regional Vice President, Wyoming Stockgrowers Association, Casper, Wyoming	36
Tinsley, Del, Owner/Publisher, Wyoming Livestock Roundup, Casper, Wyom- ing, and Member, Advisory Board, University of Wyoming College of Agriculture, Laramie, Wyoming	48
Bukowsky, Al, Owner/Operator, Solitude River Trips, Salmon, Idaho	159
Van Tassell, Larry W., Professor and Head, Department of Agricultural Eco- nomics and Rural Sociology, University of Idaho, Moscow, Idaho	182
McKillop, William, Professor Emeritus, College of Natural Resources, Univer- sity of California-Berkeley, Berkeley, California	190
Furnish, James R., Deputy Chief, National Forest System, Forest Service, U.S. Department of Agriculture, Washington, D.C.	201

ALPHABETICAL LISTING AND APPENDIX MATERIAL SUBMITTED

Bousman, Joel E.	
Testimony	36
Prepared statement	38
Bukowsky, Al	
Testimony	159
Prepared statement	165
Burns, The Honorable Conrad	
Opening statement	20
Prepared statement	22
Craig, The Honorable Larry	
Testimony	26
Crapo, The Honorable Michael D.	
Opening statement	9
Prepared statement and attachment	11
Post-hearing questions posed to Mr. Furnish	212
Enzi, The Honorable Michael B.	
Opening statement	1
Prepared statement	4
Post-hearing questions posed to Mr. Dombeck	210
Furnish, James R.	
Testimony	201
Prepared statement	203
Hurst, Jim	
Testimony	8
Subsequent submission for the record	35
McKillop, William	
Testimony	190
Prepared statement	197

IV

	Page
Thomas, The Honorable Craig	
Testimony	24
Tinsley, Del	
Testimony	48
Prepared statement and attachment	54
Van Tassell, Larry W.	
Testimony	182
Prepared statement	185

COMMENTS FOR THE RECORD

Cook, Adena, Public Lands Director, Blue Ribbon Coalition Inc., Idaho Falls, Idaho, letter	216
Eaton, The Honorable Craig D., Mayor, Town of Eureka, Montana, letter	220
Finch, Wayne, Rexford, Montana, letter	222
Johnson, Shirley May, Fortine, Montana, letter	224
Kvenild, J.R., Broker, Western Land Service, Casper, Wyoming, letter	229
Marvel, The Honorable Bill F., Mayor, Town of Rexford, Montana, letter	230
Panek, Jerry, Owner, Predator 4WD, LLC, Colorado Springs, Colorado, statement	231
Radish, Danny, Eureka, Montana, letter	236
Thoman, Mary E., Thoman Ranch—Southwestern Wyoming Ranchers, Kemmerer, Wyoming, statement	237
Safari Club International, Herndon, Virginia, statement	238
Taylor, David T., and Roger H. Coupal, Cooperative Extension Service, College of Agriculture, Department of Agricultural and Applied Economics, University of Wyoming, Laramie, Wyoming, statement and attachment	242
West, Rosetta, Eureka, Montana, letter	250

THE U.S. FOREST SERVICE: TAKING A CHAIN SAW TO SMALL BUSINESS

WEDNESDAY, OCTOBER 4, 2000

UNITED STATES SENATE,
COMMITTEE ON SMALL BUSINESS,
Washington, D.C.

The Committee met, pursuant to notice, at 9:35 a.m., in room SR-428A, Russell Senate Office Building, the Honorable Michael Enzi presiding.

Present: Senators Burns, Enzi, and Crapo.

OPENING STATEMENT OF THE HONORABLE MICHAEL B. ENZI, A UNITED STATES SENATOR FROM WYOMING

Senator ENZI. I will call to order this meeting of the United States Senate Committee on Small Business. The topic today is the U.S. Forest Service: Taking a Chain Saw to Small Business. I would like to thank Chairman Bond and his staff for their tremendous help in making this hearing possible. Through his Committee's leadership we hopefully will be able to shed new light on the workings of the U.S. Forest Service and will be able to begin the necessary steps to increase the agency's accountability to American small businesses.

I am looking forward to hearing what the participants will have to say today. I feel they have important stories that for far too long have been pushed aside in the rush by many national organizations to dominate public policy on Federal Public Lands.

As a former small business owner myself, I can personally attest to the huge impact the Forest Service can have on the economies of Wyoming and on other western communities—on our homes, our schools, the communities that are built in and around the forest. Our income often depends on being able to access these lands in order to harvest trees, minerals, natural gas, and other important resources. We use the forests to heat our homes, to graze our sheep and cattle, and for visitors.

At the same time, one of our Nation's best resources for restoring forest health, the private small business sector, has been effectively shut out and denied access to their own public lands. Over the last decade Federal timber harvests nationwide have decreased by 75 percent.

Now I hear the statistics about how much money comes in from recreation and how much less the money is that comes in from timber. We used to do both of those. We used to get the revenue from both of those, but there has been a 75-percent decrease in one of them. Because most of the larger, more successful forest products

companies rely on their own private source of timber, the decrease in timber sales has directly impacted small, family-owned and operated companies. And while this important source of timber has consistently dwindled, the demand for wood in the United States has continued to increase.

The near elimination of Federal timber harvest in the West has created a void in the market that has been filled by two main sources: timber harvested on private lands in the Southeast United States and lumber imported from Canada and other foreign countries. We are probably eliminating some important animals in other countries.

As a result of this trend, private landowners in the Southeast are now overharvesting in order to meet the current demand for wood products, and imports from Canada now exceed 35 percent of our domestic lumber supply. Once again it is the small logging, hauling and sawing companies that have not been able to involve themselves in these new market sources.

The same effect can be felt in other industries as the Forest Service continues to substitute paperwork for land management. Ranchers who lose vital grazing leases find themselves with no remaining recourse but to subdivide and sell their third-generation ranches to developers so that urban sprawl has taken the place of elk and antelope.

Other witnesses will discuss the impact on recreation and how the Forest Service is shutting down outfitters and guides. We will even hear how this agency has impacted the publishing industry by forcing the price of paper to jump dramatically in just the past year.

Could all of these threats have been avoided? No. There are always risks in any business, but while most businesses have control over at least some of the elements of their success or failure, those small businesses that are forced to work with the U.S. Forest Service too often have found themselves on the outside of any planning process that could affect their future.

One prime example that I believe demonstrates the Forest Service's serious neglect of small business involvement can be found in the way the agency has painfully avoided complying with the Regulatory Flexibility Act, or RFA, in the development of its Proposed National Forest System Land and Resources Management Plan, the Forest Transportation System Administration, and in Roadless Area Conservation regulations.

Over the past several years the General Accounting Office and the Forest Service have worked to assess the Forest Service's inefficiencies and lack of accountability as it manages our National Forests. Together, these agencies have identified a weak decision-making process and failure by the Forest Service to develop the strategic long-term goals.

One would think that an agency, struggling like the Forest Service is to develop an adequate planning process and to increase its accountability and performance, would embrace a statute like the Regulatory Flexibility Act. The RFA clearly lays out an analytical process for determining how to best achieve public policy objectives without unduly burdening small businesses.

The Forest Service, however, has gone out of its way and has performed all sorts of regulatory gymnastics to keep small businesses out of its decisionmaking process. I believe the Forest Service has attempted to twist the law and to abdicate its responsibilities under RFA by dividing or bifurcating its rulemaking process so that its rules fall within two allowable exceptions to completing a Regulatory Flexibility Analysis.

It was not the intention of Congress to allow Federal agencies to use bureaucratic rulemaking equivocation to circumvent its duties to small business. When Congress established the RFA, it did so with the goal that small businesses have a voice in the rulemaking process so that those who could least afford the layer upon layer of regulatory burdens could help find a less onerous method of accomplishing the agency's goals.

I will not place all of the blame for this situation on this agency, but must state that if the agency is operating within its legal bounds to twist the process so that it can ignore its small business constituents, then I believe Congress should step forward to amend the RFA to close any loophole that may exist. It was not our intention for the Forest Service to be unaccountable and we must ensure that this situation is corrected.

I would argue, however, that the U.S. Forest Service is accountable and that the agency is failing in its statutory duties under the RFA to consult with small businesses in the development of its rules and regulations, and that the Forest Service has failed to further comply with the statute by failing to develop less onerous alternatives that do not sacrifice economic stability. You may be assured I will investigate this issue further.

In closing, I must state that I do not believe a healthy forest and a healthy economy are mutually exclusive. In fact, I would go so far as to say that healthy forests and healthy economies are interdependent and that without a strong local economy, the U.S. Forest Service will find itself unable to meet the demands that will be placed on the agency in the next century.

[The prepared statement of Senator Enzi follows:]

Opening Statement of Senator Michael B. Enzi
United States Senate Committee on Small Business
"U.S. Forest Service: Taking a Chain Saw to Small Business"
October 4, 2000

I would like to thank Chairman Bond and his staff for their tremendous help in making this hearing possible. Through this committee's leadership we, hopefully, will be able to shed new light on the workings of the United States Forest Service, and will be able to begin the necessary steps to increase the agency's accountability to American small businesses. I am looking forward to hearing what our participants will have to say today. I feel they have important stories that, for far too long, have been pushed aside in the rush by many national organizations to dominate public policy on Federal Public Lands.

As a former small business owner myself, I can personally attest to the huge impact the Forest Service can have on the economies of Wyoming and other Western communities. Our homes, schools, and communities are built in and around Forest Service lands. Our income often depends on being able to access these lands in order to harvest trees, minerals, natural gas, and other important resources. We use the forests to heat our homes, to graze our sheep and cattle, to escort visitors for recreation, and if we don't directly use the forest, we sell goods and services to people who do. Forest Service policies, therefore, can have a tremendous effect on whether Western communities live or die.

To put this issue into perspective, the United States Forest Service controls approximately 9 percent, or about 192 million acres, of the total US land base. More than half of the standing volume of softwood timber (the kind used for construction, furniture, etc.) is on federal forest lands, most of which is currently growing in Western National Forests. With proper management, these forests could become a significant habitat for wildlife while anchoring a stable rural economy. The Forest Service, however, has neglected its stewardship to the point where there are now serious doubts about the future health of our federal forest lands and rural economies are on the brink of collapse.

As far as forest health goes, the year 2000 fire season will be recorded as one of the worst catastrophic wild fire seasons in the history of the United States. More than 10,000 square miles, or in other words, a four-mile wide strip from Washington, DC to San Francisco, burned. Many of these lands were on our National Forests.

At the same time, one of our nation's best resources for restoring forest health, the private small business sector, has been effectively shut out and denied access to their own public lands. Over the last decade, federal timber harvests nationwide have decreased by 75%. Because most of the larger, more successful forest products companies rely on their own private source of timber, the decrease in timber sales has directly impacted small, family-owned and operated companies.

And while this important source of timber has consistently dwindled, the demand for wood in the United States has continued to increase. The near elimination of federal timber harvest in the West has created a void in the market that has been filled by two main sources: (1) timber harvested on private lands in the southeast United States and (2) lumber imported from Canada and other foreign countries. As a result of this trend, private landowners in the southeast are now over-harvesting in order to meet the current demand for wood products, and imports from Canada now exceed 35% of our domestic lumber supply. Once again, it is the small logging, hauling and sawing companies that have not been able to involve themselves in these new market sources.

The same effect can be felt in other industries as the Forest Service continues to substitute paperwork for land management. Ranchers who lose vital grazing leases find themselves with no remaining recourse but to subdivide and sell their third-generation ranches to developers so that urban sprawl has taken the place of elk and antelope. Other witnesses will discuss the impact on recreation and how the Forest Service is shutting down outfitters and guides. We will even hear how this agency has impacted the publishing industry by forcing the price of paper to jump dramatically in just the past year.

Could all of these threats have been avoided? No. There are always risks in any business, but while most businesses have control over at least some of the elements of their success or failure, those small businesses that are forced to work with the US Forest Service too often have found themselves on the outside of any planning process that could affect their future.

One prime example that I believe demonstrates the Forest Service's serious neglect of small business involvement can be found in the way the agency has painfully avoided complying with the Regulatory Flexibility Act or RFA in the development of its Proposed National Forest System Land and Resource Management Planning¹, Forest Transportation System Administration², and Roadless Area Conservation³ regulations.

Over the past several years, the General Accounting Office and the Forest Service have worked to assess the Forest Service's inefficiencies and lack of accountability as it manages our National Forest lands. Together, these agencies have identified a weak decision-making process and failure by the Forest Service to develop strategic long-term goals.⁴ One would think that an agency, struggling like the Forest Service is to develop an adequate planning process and to increase its accountability and performance, would embrace a statute like the Regulatory Flexibility Act. The RFA clearly lays out an analytical process for determining how to best achieve public policy objectives without unduly burdening small businesses. The Forest Service,

¹ Fed Reg Pp. 54073-54112 [FR Doc. 99-25666] (Oct. 5, 1999)

² Fed Reg Pp. 11680-11683 [FR Doc. 00-5001] (March 3, 2000)

³ Fed Reg Pp. 30287-30308 [FR Doc. 00-11305] (May 10, 2000)

⁴ GAO/RCED-97-71 Forest Service Decision Making

however, has gone out of its way and has performed all sorts of regulatory gymnastics to keep small businesses out of its decision-making process.

Federal agencies are required by the Regulatory Flexibility Act to review each rule and regulatory proposal to determine whether the rule will have a "significant economic impact on a substantial number of small entities." If such an impact is likely to occur, the agency is required to prepare and make available for public comment an "initial regulatory flexibility analysis." As a part of this analysis document, agencies are required to identify alternatives to the proposed rule or regulation that could accomplish the same regulatory objectives with a reduced economic impact to small entities. The only exception allowed is if the agency can certify that the rule will not have a significant economic impact on a substantial number of small entities. If an agency makes this kind of certification, the agency is required to provide a factual basis for the determination, or else it must prepare a regulatory flexibility analysis.

In its Annual Report of the Chief Counsel for Advocacy on Implementation of the Regulatory Flexibility Act covering Fiscal Year 1999, the United States Small Business Administration Office of Advocacy stated, quote: "By mandating this analytical process, the RFA seeks to ensure that agencies understand not only the industries they are regulating, but the potential impact of their regulations on small entities before it becomes too late to pursue alternative measures." Meaningful input from the small business community is a crucial element of this process. The SBA report continues to state that, "The RFA is premised on the concept that when an agency undertakes a careful analysis of its proposed regulations – with sufficient small business input, – the agency can, and will, identify any disproportionate economic impact on small businesses. Thus, once an agency realizes the impact that a rule will have on small businesses, the RFA expects that the agency will seek alternative measures in order to reduce or eliminate the disproportionate burden on small businesses without compromising public policy objectives. The RFA does not require special treatment for small businesses, nor regulatory exceptions for small businesses. Rather, it mandates an analytical process for determining how best to achieve public policy objectives without unduly burdening small business."

The Forest Service, however, has attempted to twist the law, and to abdicate its responsibilities under the RFA by dividing or bifurcating its rule making process so that its rules fall within the two allowable exceptions to completing a regulatory flexibility analysis.

The Forest Service claims its actions are exempt from this statute because its proposed regulations do not have a substantial impact on small businesses because they would not "directly regulate small businesses⁵," and that they in no way affect any existing requirements applicable to small entities. Under this theory, the agency argues its proposed rules are designed to direct Forest Supervisors as they develop individual Forest Plans and that any limitations to small businesses are only imposed solely by the Forest Plans which, the agency further argues, are not rules or regulations, even though the plans are required by statute and have a legally

⁵ Initial Regulatory Flexibility Analysis for the Proposed Rule on Roadless Area Conservation, April 26, 2000 p. 2.

binding effect on all future forest activities⁶. What the Agency fails to do, however, is explain what happened in this entire convoluted process to its accountability to small business as required by the RFA.

It was not the intention of Congress to allow federal agencies to use bureaucratic, rule making equivocation to circumvent its duties to small business. When Congress established the RFA, it did so with the goal that small business have a voice in the rule making process, so that those who could least afford the layer, upon layer of regulatory burdens could help find a less onerous method of accomplishing the agencies goals.

When I look at the many forest plans, regulations, policies and rules promulgated by the US Forest Service I can help but wonder, where in any of their processes does the agency demonstrate its accountability to small businesses? It isn't present in its rule making, it isn't present in its forest plans, and it definitely isn't present in its current policy implementation.

I will not place all of the blame for this situation on this agency, but must state that if the agency is operating within its legal bounds to twist the process so that it can ignore its small business constituents, then I believe Congress should step forward to amend the RFA to close any

⁶ In a GAO legal opinion regarding the Environmental Protection Agency's (EPA) RFA compliance with regulations promulgated pursuant to the Clean Water Act, the GAO explained that the courts have held consistently that agencies may properly certify no regulatory flexibility analysis is necessary when the agencies determine the rule will not have a significant economic impact on a substantial number of small entities that are subject to the requirements of the rule. Michigan v. EPA, No. 98-1497, 2000 U.S. App. LEXIS 3209 (D.C. Cir. Mar. 3, 2000); American Trucking Ass'n v. EPA, 175 F.3d 1027, 1045 (D.C. Cir., reh'g granted in part, denied in part, 195 F.3d 4 (D.C. Cir. 1999), cert. granted, 68 U.S.L.W. 3724 (U.S. May 22, 2000) (No. 99-1257); Motor & Equip. Mfrs. Ass'n v. Nichols, 142 F.3d 449, 467 (D.C. Cir. 1998); United Distribution Cos. v. FERC, 88 F.3d 1105, 1171 (D.C. Cir. 1996); Mid-Tex Elec. Coop. Inc. v. FERC, 773 F.2d 327, 342 (D.C. Cir. 1985).

The courts have also determined that "Congress did not intend to require that every agency consider every indirect effect that any regulation might have on small businesses in any stratum of the national economy." Mid-Tex Elec. Coop. Inc. v. FERC, 773 F.2d 327, 343 (D.C. Cir. 1996).

In the above mentioned cases, the regulations promulgated by the agencies in question regulated an intervening third party. As such the agencies did not have a direct control over the implementation of the rule on small entities. In the case of the EPA, the agency used the regulations to establish standards for states, which in turn issued state regulations that directly regulated small entities. In the case of FERC, the agency regulated a large business that in turn collected increased rate payments by smaller wholesalers. Where an intervening third party would have discretion over the many variables directly impacting small entities and the agency action does not directly regulate small entities and the agency, therefore, can properly certify that a regulatory flexibility analysis is not needed.

In the case of the Forest Service, however, there is no intervening third party. The agency has complete control of all of the variables involved in the rulemaking and implementation process. While the proposed planning and proposed transportation rules may arguably be sufficiently separate from the implementation process in that they do not directly "affect any existing requirements applicable to small entities," Southwestern Pennsylvania Growth Alliance v. Browner, 121 F.3d 106, 123 (3d Cir. 1997), the proposed Roadless Conservation Area rules and individual forest plans are agency statements "of general or particular applicability and future effect designed to implement, interpret, or prescribe law or policy or describing the organization, procedure, or practice requirements of [the] agency. . ." See 5 USC 551(4) definition of "a rule."

Because the proposed Roadless Conservation Area rule directly prohibits activities in areas designated as unclassified roads, and the individual forest plans carry the full effect of law once they are properly established and regulate the type and scope of activities on specific federal lands, the agency cannot claim that these actions fall outside of the scope of the RFA.

To allow the agency to use creative regulatory construction to avoid its statutory obligations to the RFA would violate the intent of Congress in establishing the RFA.

loophole that may exist. It was not our intention for the Forest Service to be unaccountable and we must ensure this situation is corrected.

I would argue, however, that the United States Forest Service is accountable, and that the agency is failing in its statutory duties under the RFA to consult with small businesses in the development of its rules and regulations, and that the Forest Service has failed further comply with the statute by failing to develop less onerous alternatives that do not sacrifice economic stability. You may be assured that I will investigate this issue further.

In closing, I must state that I do not believe a healthy forest and a healthy economy are mutually exclusive. In fact, I would go so far as to say that healthy forests and healthy economies are interdependent, and that without a strong local economy, the United States Forest Service will find itself unable to meet the demands that will be placed on the agency into the next century.

####

Senator ENZI. I defer to Senator Crapo.

**OPENING STATEMENT OF THE HONORABLE MICHAEL D.
CRAPO, A UNITED STATES SENATOR FROM IDAHO**

Senator CRAPO. Thank you very much, Chairman Enzi, and I have a full statement which I will submit for the record and I will try to make my remarks brief.

I thank the Small Business Committee and Chairman Bond for allowing this important issue to be addressed before this Committee. It may be unusual for many people to see the Small Business Committee examining forest policies but as you will see today, there is a very direct impact and a critical issue that is now very evident.

We know that, in the past, the Forest Service policies have had a negative impact on small businesses throughout the Nation. It is my hope that, through efforts such as this hearing and others, the Forest Service can be made accountable for fulfilling its mission while allowing interested stakeholders to effectively participate in the policymaking process.

In Idaho we have more than 20-million acres of National Forest land, which is 10 percent of the National Forest System. Everytime that the Forest Service issues and carries out a proposal, businesses in Idaho will be affected. There is no way around that.

But what we can strive for is a process whereby the Forest Service actively engages those people who are affected by its land management policies in order to foster active environmental stewardship of our public lands and resources without harming the economy.

Today that type of cooperation between the Forest Service and the small businesses is absent. As stated in the Small Business Administration's Office of Advocacy statement on July 17, 2000, to the Forest Service which, Mr. Chairman, I would like to submit for the record:

The public has an interest in knowing the potential economic impact of a particular proposed regulation. . . . Providing the public with a complete economic analysis that fully discloses the potential impact of the action and considers less burdensome alternatives not only complies with the requirements of the RFA, it also complies with the basic tenets of sound public policy that balance conflicting interests.

The Federal Regulatory Flexibility Act, the RFA, of 1980 which was later strengthened by the passage of the Small Business Regulatory Enforcement Fairness Act of 1996, directs government agencies to conduct a series of analyses describing the impact of a proposed rule if it will have a significant economic impact on a substantial number of small entities.

As a result, agencies must determine whether a rule is expected to have a significant economic impact on small businesses. It is apparent that the Forest Service has repeatedly acted in a manner that contradicts the law of the land. It has failed to adequately and accurately account for the direct or indirect financial or other effects that a proposed action would have on small businesses.

For example, on May 10, 2000, the Forest Service published a proposed rule on *Roadless Area Conservation*. Unbelievably, the Forest Service has argued that this proposed rulemaking would not

have a significant economic impact on a substantial number of small businesses and therefore that it is not required to comply with the requirements of the Small Business Regulatory Enforcement Fairness Act.

Again citing the Office of Advocacy's letter to the Forest Service, "case law and the facts support a finding that the impact of the proposal is indeed direct, not indirect," as the Forest Service argued. Therefore, the RFA necessitates total compliance by the Forest Service.

In this example, the Forest Service's Initial Regulatory Flexibility Analysis did not adequately address the issue of economic impact. A full, detailed economic analysis of the impact of the Forest Service's policies should be completed prior to the finalizing of any such proposals.

This roadless proposal reaches far and wide, but other policies pursued by the Forest Service challenge the resolve of small businesses on a daily basis. Among many others, the recreation, timber, logging, ranching and mining industries have been imposed upon with the onerous burden of defending themselves against these rules.

From national policies such as the roadless rule, draft transportation plan, strategic plan, and the cost recovery rule, to regional and local plans, the Forest Service is showing a disregard for the impact of its policies on small businesses. The Federal Government has an obligation to ensure that its policies will not have an unwarranted effect on individuals. The Forest Service is not meeting that obligation.

Although the Forest Service may contend that many of its policies are a result of other environmental laws like the Endangered Species Act or the Clean Water Act, I disagree. Closing access may be the easiest way to comply with outside factors, but it is not the right way to do it. It may take more effort but the Forest Service should and can work together with interested parties to address both environmental and economic concerns.

I want to thank the witnesses for your participation in this hearing and look forward to your testimony. Your input based on your personal experiences will be particularly helpful as we further investigate this issue.

I also want to thank Senator Craig and Senator Thomas for their participation in this hearing. As chairman of Senate Subcommittees, which have jurisdiction over these issues, I look forward to their insight on these issues. Thank you, Mr. Chairman.

[The prepared statement and attachment of Senator Crapo follow:]

Statement of Senator Michael D. Crapo
 United States Senate Committee on Small Business
 "U.S. Forest Service: Taking a Chain Saw to Small Business"
 October 4, 2000

Thank you to the Small Business Committee and Chairman Bond for allowing this important issue to be addressed before this Committee. We know that, in the past, Forest Service policies have had a negative impact on small businesses throughout the nation. It is my hope, that through efforts such as this, the Forest Service can be accountable for fulfilling its mission, while allowing interested stakeholders to effectively participate in the policy making process.

In Idaho, we have more than twenty million acres of national forest land—10 percent of the National Forest System. Every time the Forest Service issues and carries out a proposal, businesses in Idaho will be affected. There is no way around that. But what we can strive for is a process whereby the Forest Service actively engages those people that are affected by its land management policies in order to foster active environmental stewardship of our public lands and resources without harming the economy.

Today, that type of cooperation between the Forest Service and small businesses is absent. The efforts of the Forest Service to ignore the concerns of small businesses must end. As stated in the Small Business Administration's Office of Advocacy July 17, 2000, statement to the Forest Service, which I would like to submit for the record, "The public has an interest in knowing the potential economic impact of a particular proposed regulation.....Providing the public with a complete economic analysis that fully discloses the potential impact of the action and considers less burdensome alternatives not only complies with the requirements of the RFA, it also complies with the basic tenets of sound public policy that balance conflicting interests."

The federal Regulatory Flexibility Act (RFA) of 1980, which was later strengthened by the passage of the Small Business Regulatory Enforcement Fairness Act (SBREFA) of 1996, directs government agencies to conduct a series of analyses describing the impact of a proposed rule if it will have a significant economic impact on a substantial number of small entities. As a result, agencies must determine whether a rule is expected to have a significant impact on small businesses. It is apparent that the Forest Service has repeatedly acted in a manner that contradicts the law of the land. It has failed to adequately and accurately account for the direct or indirect financial or other impact a proposed action would have on small businesses.

For example, on May 10, 2000, the Forest Service published a proposed rule on *Roadless Area Conservation*. The Forest Service has argued that this proposed rulemaking would not have a significant economic impact on a substantial number of small businesses and, therefore, is not required to comply with the requirements of SBREFA. Again, citing the Office of Advocacy's letter to the Forest Service, "case law and the facts support a finding that the impact of the proposal is indeed direct, not indirect," as the Forest Service argued.

Therefore, the RFA necessitates total compliance by the Forest Service.

In this example, the Forest Service's Initial Regulatory Flexibility analysis (IRFA) did not adequately address the issue of economic impact. A full, detailed economic analysis of the impact of the Forest Service's policies should be completed prior to finalizing any proposals. I am confident that such an analysis would clearly demonstrate that the proposed policies represent severe economic ramifications for small businesses in various regions of the country. Furthermore, these real complications should and can be avoided by sustaining the implementation of the rules currently pending, and offering sensible alternatives.

This roadless proposal reaches far and wide, but other policies pursued by the Forest Service challenge the resolve of small businesses on a daily basis. Among many others, the recreation, timber, logging, ranching, and mining industries have been imposed with the onerous burden of defending themselves against these rules. In other words, small businesses are completely blocked from the rulemaking process and then forced to fight big government. Big government against small businesses? Who do you think is going to win? I think the Forest Service is banking on this.

From national policies such as the roadless rule, draft transportation plan, strategic plan, and the cost recovery rule to regional and local plans the Forest Service is showing a disregard for the impact of its policies on small businesses. Even in the manner that the Forest Service fought the fires it did not take into consideration impacts on small business. The federal government has an obligation to ensure that its policies will not have an unwarranted effect on individuals. The Forest Service is not meeting this obligation.

Although the Forest Service may contend that many of its policies are a result of other environmental laws, like the Endangered Species Act or Clean Water Act, I disagree. Closing access may be the easiest way to comply with outside factors, but its not the right way to do it. It may take more effort, but the Forest Service should and can work together with interested parties to address both environmental and economic concerns.

Clearly, the involvement of affected parties throughout the decision-making process is required to ensure that decisions are made in the best interests of all involved. If we work together and acknowledge the importance of everyone's view we can develop a solution where everyone wins, not the lowest common denominator solutions the current NEPA process fosters.

I want to thank the witnesses for their participation in this hearing and look forward to your testimony. Your input based on your personal experiences will be particularly helpful as we further investigate this issue. I also want to thank Senator Craig for his participation in this hearing. As Chairman of the two Senate subcommittees with jurisdiction over the U.S. Forest Service, I look forward to his insight into this issue.



Office of Advocacy

July 17, 2000

VIA ELECTRONIC &
REGULAR MAIL

Hilda Diaz-Soltero
Associate Chief
United States Department of Agriculture
Forest Service
Washington, DC
Email: roadlessdeis@fs.fed.us

Dear Ms. Diaz-Soltero:

As stated in previous correspondence on this issue, the Office of Advocacy of the U.S. Small Business Administration (SBA) was established by Congress under Pub. L. No. 94-305 to represent the views of small business before federal agencies and Congress. Advocacy is also required by §612(a) of the Regulatory Flexibility Act (RFA) (5 U.S.C. 601-612) to monitor agency compliance with the RFA. In that Advocacy is an independent office within SBA, the comments provided are solely those of the Office of Advocacy and do not necessarily reflect the views of SBA.

A Brief Review of RFA Compliance Requirements

Initial Regulatory Flexibility Analysis

The RFA requires agencies to consider the impact that a proposed rulemaking will have on small entities. If the proposal is expected to have a significant impact on a substantial number of small entities, the agency is required to prepare an initial regulatory flexibility analysis (IRFA) describing the reasons the action is being considered; a succinct statement of the objectives of, and legal basis for the proposal; the estimated number and types of small entities to which the proposed rule will apply; the projected reporting, recordkeeping, and other compliance requirements, including an estimate of the small entities subject to the requirements and the professional skills necessary to comply; all relevant Federal rules which may duplicate, overlap, or conflict with the proposed rule; and the significant alternatives that accomplish the stated objectives of the of the statutes and that minimize any significant economic impact of the proposed rule on small entities. 5 U.S.C § 603. The analysis or a summary of the analysis must be published with the proposal for public comment.

Final Regulatory Flexibility Analysis

When an agency issues any final rule, it must prepare a final regulatory flexibility analysis (FRFA) when a rule will have a significant economic impact on a substantial number of small entities. The FRFA must discuss the comments received, the alternatives considered and the rationale for the final rule. Specifically, each FRFA must contain a succinct statement of the need for and objectives of the rule; a summary of the significant issues raised by public comments in response to the IRFA; a summary of the agency's assessment of such issues and a statement of any changes made in the proposed rule as a result of such comments; a description and an estimate of the number of small businesses to which the rule will apply or an explanation of why no such estimate is available; a description of the projected reporting, recordkeeping and other compliance requirements of the rule, including an estimate of the classes of small entities that will be subject to the requirement and the types of professional skills necessary for the preparation of the report or record; and a description of the steps the agency has taken to minimize the significant economic impacts on small entities consistent with the stated objectives of applicable statutes, including a statement of the factual, policy and legal reasons for selecting the alternative adopted in the final rule, and the reasons for rejecting each of the other significant alternatives. In complying with the provisions of section 603 and 604 of the RFA, an agency may provide either a quantifiable or numerical description of the effects of a proposed rule or alternatives to the proposed rule, or more general descriptive statements if quantification is not practicable or reliable. 5 U.S.C. § 607.

Certification in Lieu of a Regulatory Flexibility Analysis

If the proposed or final rulemaking is not expected to have a significant economic impact on a substantial number of small entities, 5 USC §605 of the RFA allows an agency to certify a rule, in lieu of preparing an IRFA or FRFA. If the head of the agency makes such a certification, the agency shall publish such a certification in the Federal Register at the time of the publication of the general notice of proposed or final rulemaking for the rule along with a statement providing the factual basis for the certification. See 5 U.S.C. §605(b).

The Proposed Rulemaking

Because of the nature of this rule, the Office of Advocacy consistently maintained in its pre-proposal comments to the Forest Service (FS) that certification was inappropriate from a public policy standpoint. On May 10, 2000, FS published a proposed rule in the *Federal Register*, Vol. 65, No. 91, p.30276 on *Special Areas; Roadless Area Conservation*. The purpose of the proposal is to protect the environmental resources in national forests by prohibiting road construction and reconstruction in most inventoried roadless areas of the National Forest System and require the evaluation of roadless area characteristics in the context of overall multiple-use objectives during land and resource management plan revisions. The intent of the rulemaking is to provide lasting protection in the context of multiple use management for inventoried roadless areas and other unroaded areas within the National Forest System. Id.

Prior to the proposal, the Office of Advocacy worked with FS in an effort to assist FS with RFA compliance. Throughout the process, FS has maintained that it believed that the proposed rulemaking would not have a significant economic impact on a substantial number of small businesses. FS has also contended that the proposed rule does not directly regulate small entities and, therefore, an IRFA was not necessary. Nevertheless, FS prepared an Initial Regulatory Flexibility Analysis (IRFA) at Advocacy's request. Because FS did not have sufficient economic

information to prepare a complete IRFA, Advocacy advised FS to include a list of questions in the IRFA to solicit from the public information on the economic impacts of the proposal. FS complied with this request also. ⁽¹⁾ See, Fed. Reg. at 30285-30286.

FS Should Abandon Its Assertion that the Rule Does Have a Direct Impact on Small Entities

As stated above, FS has consistently asserted that a regulatory flexibility analysis is not required since the proposal does not have a direct impact on small entities. It is Advocacy's understanding that the basis of the assertion is that the proposal establishes procedures, and nothing more, to be followed in local forest planning processes. Local FS offices will maintain the authority to determine the actual forest plan; hence national FS is not directly regulating small entities. Consequently, a regulatory flexibility analysis is not required.

Advocacy acknowledges that there is case law that states that the RFA only requires an agency to perform a regulatory flexibility analysis of small entity impacts when a rule directly regulates them. However, Advocacy asserts that the cases are inapplicable to FS' proposal. If anything, the case law and the facts support a finding that the impact of the proposal is indeed direct, not indirect.

The primary case on the consideration of direct versus indirect impacts for RFA purposes in promulgating regulations is Mid-Tex Electric Co-op Inc. v. F.E.R.C., 249 U.S. App. D.C. 64, 773 F.2d 327 (1985). In Mid-Tex Electric Co-op Inc. v. F.E.R.C., FERC ruled that electric utility companies could include in their rate bases amounts equal to 50% of their investments in construction work in progress (CWIP). In promulgating the rule, FERC certified that the rule would not have a significant economic impact on a substantial number of small entities. The basis of the certification was that virtually all of the utilities did not fall within the meaning of the term small entities as defined by the RFA. Plaintiffs argued that FERC's certification was insufficient because it should have considered the impact on wholesale customers of the utilities as well as the regulated utilities. The court dismissed the plaintiffs' argument and concluded that an agency may certify that no RFA analysis is necessary when it determines that the rule will not have a significant economic impact on a substantial number of small entities that are not subject to the requirements of the rule. Id. at 64.

The US Court of Appeals for the District of Columbia applied the holding of the Mid-Tex case in American Trucking Associations, Inc. v. U.S. E.P.A., 175 F.3d 1027, 336 U.S. App. D.C. 16 (D.C. Cir., May 14, 1999) (hereinafter ATA). In the ATA case, EPA established a primary national ambient air quality standards (NAAQS) for ozone and particulate matter. At the time of the rulemaking, EPA certified the rule pursuant to 5 USC § 605(b). The basis of the certification was that EPA had concluded that small entities were not subject to the rule because the NAAQS regulated small entities indirectly through the state implementation plans (SIPs). Id. Although the Court remanded the rule to the agency, the Court found that EPA had complied with the requirements of the RFA. Specifically, the Court found that since the States, not EPA, had the direct authority to impose the burden on small entities, EPA's regulation did not directly impact small entities. The Court also found that since the states would have broad discretion in obtaining compliance with the NAAQS, small entities were only indirectly affected by the standards. Id.

In Mid-Tex, compliance with FERC's regulation by the utilities would have a ripple effect on

customers of the small utilities. There were several unknown factors in the decisionmaking process that were beyond FERC's control like whether utility companies had investments, the number of investments, costs of the investments, the decision of what would be recouped, who would the utilities pass the investment costs onto, etc. In this instance, FS is the ultimate decision-maker and its decisions will have a direct effect on known small entities that have profited from multiple use of FS' lands in the past or which planned to profit from the resources in the future.

Likewise, this matter is distinguishable from the ATA case. Unlike the ATA case, where EPA was setting standards for the States to implement under state regulatory authority, FS is developing a framework for the local/regional FS offices to use in adopting multiple use plans for national forests. The fact that it is a local office of FS versus the national office of FS is inconsequential. In either event, FS will implement the rule, not a third party entity. Regardless of where the office is located, FS is making the ultimate decision of whether a road will or will not be constructed. The proposed rule clearly states that roads may not be constructed or reconstructed in the unroaded portions of inventoried areas of the National Forest System unless the road is needed for public safety, for environmental response or restoration, for outstanding rights or interests protected by statute or treaty, or to prevent irreparable resource damage. See, Section 294.12, Fed. Reg., p. 30288.

Direct Impacts on Small Entities

Moreover, small entities will be directly affected as a result of FS' decisions. The word "direct" is defined as "to regulate the activities or course of action thereof; stemming immediately from a source, cause, or reason; operating without agency or step..." (2) Small entities that already operate in national forests will have their operations seriously curtailed. (FS recognizes that the majority of these entities are small.) These and others, like the construction companies that build the roads, may have developed their business plans based on expectations of continued access and as a result of previously published FS plans. These impacts need to be evaluated. FS has some data already that would allow it to do so. For example, according to Tables 4 and 6 of the IRFA, the proposal estimates that there will be a 45% reduction in forest harvest in the Manti-Lasal National Forest alone in Utah. Other forests, such as Dixie (Utah) and Shoshone (Wyoming) will experience reductions in harvest that exceed 20%. In Montana, the Helena Forest will experience a reduction in total harvest volume of 12%. In those same areas of the country, FS controls more than 50% of the forested land base.(3) For example, FS controls 52.3% of forested land in Montana; 66.6% of the land in Wyoming; and 68.5% of the forested land in Utah.(4) Considering the vast amount of area owned by the FS, moving to or procuring from another location to harvest or process natural resources may be unrealistic or a short term solution. The end result of this proposal may be the ultimate demise of small businesses and small governmental jurisdictions that rely on the resources.

Advocacy recognizes that there is a substantial public policy interest in maintaining the natural beauty of the national forests and protecting the environmental resources found in the national forests. However, just these few examples indicate that the overall impact of this initiative could be economically devastating to many small businesses. The high percentage of reduction, combined with the fact that FS owns such a high percentage of the land in some areas, indicates that this rule may have a direct economic effect that cannot be recouped at other locations by the small entities that rely on them. Since the FS has some data, and will receive additional data from the comment period, it is not plausible for FS to continue to maintain that the proposal will

not have a direct effect on small entities.(5)

Information Provided By the Public Must Be Addressed in the FRFA

At the time of the proposal, FS asserted that they could not perform a complete IRFA because it lacked sufficient economic information about the economic impacts on the industry. Because its information was insufficient, FS provided a list of questions in an attempt to obtain the necessary information from the public. In reviewing the comments from the public, Advocacy hopes that FS will give full consideration to the information provided by the industry in response to FS' solicitation for additional information and perform an analysis that reflects 1) the impact on small entities that had access to resources that will have limited or no access after the rulemaking; 2) the impact of the regulation on small entities that were relying on future activities that will not occur as a result of the regulation; and 3) the impact of the regulation on activities outside of the FS lands (i.e. small communities).

Since our comments are being submitted prior to the close of the comment period, we cannot comment on the full scope of the information that FS may receive from the public regarding the economic impacts of this rule. However, we have received some information from the industry about potential impacts. The early information received indicates that the impact may in fact be significant. For example, representatives of the timber industry, which FS acknowledges is primarily dominated by small businesses, assert that FS controls 73.3% of the saw timber in Montana; 80.8% of the saw timber in Wyoming; and 85.4% of the timber volume in Utah.(6) In the IRFA, FS asserts that the reduction in harvest as a result of this rule could range from 1 to 8% depending on the location(7). Fed. Reg. at 30286. Considering the high dependence on FS timber in certain areas, a 1 to 8% reduction could be economically significant. If not, FS needs to provide data showing why it is not economically significant to support its conclusion in the FRFA.

Moreover, the mining industry has indicated that the proposal disallows mining on 43 million acres of federal land. It asserts that more than \$7 trillion dollars of coal and metal resources will be placed off limits by the proposed rule.(8) If this is not correct, then FS must explain why these resources will still be available and the approximate costs of obtaining access to the resources in areas where road construction and reconstruction is prohibited.

Economic effects such as these cannot be ignored. These early numbers indicate that the impact may indeed be significant. FS needs to explain why they are not significant and provide this information to the public. On the other hand, if the analysis indicates that the impact is indeed significant, Advocacy asserts that FS must fully address this in the FRFA and possibly repropose the rule.

Alternatives Provided By Public Must be Given Full Consideration

The RFA requires an agency to consider alternatives to the proposal and provide a statement of the factual, policy and legal reasons for selecting the alternative adopted. 5 USC §605. If a reasonable alternative is provided from a member of the public, the agency must give it its full consideration. In its testimony before the House Subcommittee on Rural Enterprises, Business Opportunities, and Special Small Business Problems, the Northwest Mining Association suggested the alternative of allowing temporary roads, on an as needed basis, with either natural or affirmative reclamation. While Advocacy acknowledges that it is not an expert in forest

planning, this seems like an alternative in allows harvesting of natural resources while assuring that the forests are not permanently damaged or irreparably harmed. At least the mitigating impacts of this alternative should be carefully analyzed.

Northwest Mining's suggestion is only one of what may be several strong alternatives offered by the public as a less burdensome solution to the problem. Failure to fully address alternatives that may provide a workable solution to the problem may violate the RFA and raise questions as to whether the agency actions were arbitrary and capricious. If challenged, a court may find that FS' treatment of alternatives was insufficient.

In addition, Advocacy believes that FS should require local FS planners to require local FS planners to perform an RFA analysis in drafting future forest plans that implement this rulemaking to assure that the implementation minimizes the economic impact while achieving the goal of preserving the environment. RFA compliance will provide the public with information necessary to participate fully in the rulemaking process and possibly provide suggestions as to ways that may make implementation less costly.

Conclusion

The Office of Advocacy recognizes the importance of protecting the environment, conserving our national forests, and preserving the natural beauty of the area. However, there is also a significant public interest in allowing access to natural resources in order to preserve our economic base. The potential economic impact of this proposal on small businesses and small communities could be devastating. Prior to implementing such a rule, FS should make every attempt to understand fully the economic impact of its actions and to find less burdensome or mitigating alternatives. In the alternative, it should explain fully why these alternatives will not help FS achieve its environmental objectives. As Advocacy has stated on several occasions, the requirements of the RFA are not intended to prevent an agency from fulfilling its statutory mandate. Rather, it is intended to assure that the economic impacts are fairly weighed and considered in the regulatory decision making process.

The public has an interest in knowing the potential economic impact of a particular proposed regulation. As the court stated when remanding a rule to the agency in Northwest Mining v. Babbitt, "While recognizing the public interest in preserving the environment, the Court also recognizes the public interest in preserving the rights of parties which are affected by government regulation to be adequately informed when their interests are at stake and to participate in the regulatory process as directed by Congress." Supra, at 13. Providing the public with a complete economic analysis that fully discloses the potential impact of the action and considers less burdensome alternatives not only complies with the requirements of the RFA, it also complies with the basic tenets of sound public policy that balance conflicting interests.

Thank you for the opportunity to comment on this proposal. If you have any questions, please feel free to contact us. Please place a copy of these comments in the record.

Sincerely,

Jere W. Glover
Chief Counsel
Office of Advocacy

Jennifer A. Smith
Assistant Chief Counsel
for Economic Regulation &
International Trade

Brian Headd
Economist

Cc: Charles Rawls

ENDNOTES

1. Usually, the Office of Advocacy does not publicize its interaction with an agency during the prior to the proposal of a rule. However, since Forest Service has agreed to release communications that it had with the Office of Advocacy to House Committee on Small Business, Subcommittee on Rural Enterprises, Business Opportunities, and Special Programs, the communications are now part of the public record.

2. The Merriam Webster Dictionary.

3. Testimony of Mr. Frank Glaties, President of Independent Forest Product Association, before The House of Representatives Subcommittee on Rural Enterprises, Business Opportunities, and Special Business Programs, Tuesday, July 11, 2000, pp. 9-10.

4. Id.

5. Advocacy notes that FS may be arguing that the RFA does not apply because the use of FS property for harvesting natural resources is a future activity that may or may not occur, depending on the decision of the forest planners. While this argument may have some validity, it is not necessarily convincing. Some of the land that is being placed off limits by the initiative was originally targeted for resource harvesting. As a result of this rule, forest planners will not be able to allow the original tentative multiple use plans to be implemented. Small entities may have relied on the original plans in making business decisions. This issue should be addressed.

6. Id.

7. On the surface, the percentages in the IRFA summary appear to be inconsistent with the tables found in the IRFA. FS needs to explain the inconsistencies found in the documents.

8. Testimony of Laura Skauer, Northwest mining Association

Senator ENZI. Senator Burns.

**OPENING STATEMENT OF THE HONORABLE CONRAD BURNS,
A UNITED STATES SENATOR FROM MONTANA**

Senator BURNS. Thank you very much, Mr. Chairman. I want to thank Senator Thomas and Senator Craig for coming this morning. We sit together on the Energy and Natural Resource Committee and of course our dialog with the Forest Service is ongoing about every time we have a Committee hearing.

Just to give you an idea on how the relationship between Congress and the Forest Service and also the local people that live in communities in and around our National Forests has deteriorated, yesterday in Interior Appropriations we eliminated the funds for the second time for the assistant secretary of agriculture that is in charge of the Forest Service, and for good reason. It is just an indication of the erosion in the communications between the Forest Service that is here in this town and the foresters on the ground in our different communities.

I believe it is vitally important that we focus specifically on how these policies that are set by the Forest Service are hurting our businesses in and around our forests.

Whenever there is a change proposed for the use of public land, we always have to do an EIS, an environmental impact statement. Well, we can turn environmental into economic and that is going to have to be done, too, in order to give an overall view of the effects these decisions have on this country.

People are being put out of work and today we are going to see real people with real faces that have real concerns about their businesses and the people who work in those businesses.

We are small businesses in Montana. Ninety-nine percent of our businesses in Montana are 100 employees or less. So we know what it is like. New rules have reduced the amount of timber harvested from our public lands by over 90 percent in the last 10 years. New rules have blocked new roads from being built. New rules have reduced grazing allotments on public lands. The current rules have punished our outfitters and guides and left them with virtually no economic stability.

I want to give you an example and it is sitting right here. This is from a tree that lies 50 feet off the road. It is dead. It died of pine bark beetle and there are thousands and thousands of board feet available within a rope's throw of a road that can be harvested to keep our mills alive and lumber flowing for our consumers.

There have been no plans, none at all, no effort made by the Forest Service in order to deal with this situation. And this log, this piece, comes from just a few miles from where American Timber shut down their mill this last year. It went out of business early this year and now we have another mill that is not very far away from it that is cutting back on their employees.

This is letting a natural resource just go to waste. Not only do we not have access to the resource but also our infrastructure and the base of employees has also eroded and pretty soon those folks will be gone.

So I will submit my full statement, Mr. Chairman. I am glad that Jim Hurst is here today from up in Eureka country. I prom-

ised him one thing, that we would have him out of here so he would be home to watch his son play football on Friday night, and we are going to do that.

I thank you for having this hearing and my congratulations to Senator Bond for facilitating it.

[The prepared statement of Senator Burns follows:]

Opening Statement of Senator Conrad Burns
Committee on Small Business
Hearing entitled
"The U.S. Forest Service: Taking a Chainsaw to Small Business"
October 4, 2000

First, I want to thank the Small Business Committee for finally holding this hearing. I originally requested this spring that we investigate the impact of proposed Forest Service policy changes on our small business entities. I understand that Forest Service policy is not the type of subject we generally address in this committee, but we have a very important issue before us today. I know that many of my colleagues share my concern that the ongoing changes in the Forest Service are devastating our small businesses.

In my home state of Montana, 92% of our businesses are truly small, less than 100 people. I know just how important these mom-and-pop operations are to our communities. They are the lifeblood of the rural communities and support the way of life we treasure. Since nearly 30% of Montana's land base is under public ownership, these Montana small businesses have no choice but to rely on opportunities on federal land and they are directly affected by Forest Service policies that limit economic activity.

As most of you know, I also sit on the Senate Committee on Energy and Natural Resources. In that committee we have investigated many of the policies of Forest Service, but I believe it is vitally important that we focus specifically on how these policies are hurting small business. I firmly believe it is small business that shoulders much of the burden. Unfortunately, I don't believe we have focused enough on the human impact on caused by the Forest Service's neglect of its duty to provide economic opportunity off of our forest lands.

People are being put out of work by these rules, and they need our help. I wish having this hearing would fix the problem, but I've been here long enough to know this is another piece in the puzzle. We have a big problem in front of us and fixing it will take some doing. I am glad that we are educating another Committee and another group of people. It is the only way we can help people understand how many small business owners, employees, families and communities are negatively impacted every year because the Forest Service

continues to create a rules with no regard for their economic impact in rural America.

New rules have reduced the amount of timber harvested from our public lands by over 90% over the past 10 years . New rules have blocked new roads from being built. New rules have reduced grazing allotments on public land, and current rules have punished our outfitters and guides and left them with virtually no economic stability.

I am extremely glad Jim Hurst could join us here today to talk about what these rules mean to his home town. Jim is a good friend and I have witnessed the personal pain he has felt as he has struggled to make payroll in a bitter economic environment. He can explain to you how we have watched as Montana timber mills have closed one by one, and how it feels to tell your friends and neighbors who have worked with you for years that their jobs are gone. Jim is a man who is dedicated to his family and to his community, and I know for a fact the only reasons he came all the way out here to be with us is that we assured him his testimony would make a difference.

Secondly, we promised him that he'd be home in time for his son's football game. I can appreciate that, and all I ask of us today is that when Jim goes to that football game this weekend and the loggers and mill workers who are his friends ask him about going to Washington, I just want him to be able to look them in the eye and tell them it made a difference. I want him to tell them that the Senators here today understand the problem with the Forest Service and we are dedicated to making things better. I think that is the least we can do for him.

Senator CRAPO. So this hearing is going to go till Friday afternoon?

Senator BURNS. Yes, we are going to be here until we get it all ironed out. Did you bring a lunch?

Senator ENZI. I want to thank everybody who is participating today. I particularly want to thank this first panel, our distinguished colleagues from the committee of jurisdiction. We are handling a very small part of the issue, the small business issue. Of course, in each of your States small businesses actually, by Federal definition, would probably be about 98 percent of the businesses, so it is not that small a part of the economy. We have a lot of discussions in this Committee here about what small business is and 500 employees seems pretty big to us in Wyoming.

It is my pleasure to welcome the Senior Senator from Wyoming, Senator Thomas, and the Senior Senator from Idaho, Senator Craig. Senator Thomas, would you like to begin?

STATEMENT OF THE HONORABLE CRAIG THOMAS, A UNITED STATES SENATOR FROM WYOMING

Senator THOMAS. All right, Mr. Chairman. Thank you.

First of all, I want to thank you for having this hearing. I appreciate it very much. All of us are concerned, of course, about these issues and the impacts that Forest Service policy has on small business and indeed on all we do in our States.

Both Senator Enzi and Senator Craig and I were in Billings, Montana, with Senator Burns recently and heard these kinds of things very directly as they related to the fire damages, and so on, so I think it is great to do this.

Obviously all of us are concerned about this issue. The preservation of the resource is, of course, very high on all of our agendas. I grew up right outside the Shoshone National Forest in Cody, Wyoming, and I am very glad the forest is there and I want to work to protect it the best that I can. Certainly the first purpose is to do that but the second is to allow the owners of that forest to participate in it, to enjoy it, to have access to it, and I think that is really what we are talking about here.

This administration has moved steadily toward cutting off access. Whether it is the EPA, whether it is the White House Council on Environmental Quality, whether it is the Department of the Interior, whether in this case it is the Department of Agriculture, I think clearly there has been an overt movement to reduce access to these lands.

All of us here this morning, of course, understand the importance of public land access. In our State 50 percent of the State belongs to the Federal Government. It is higher than that in some of your States. So it has a great deal of impact on all of us and what we do and on our economy, of course.

We recognize that these lands are in different Federal ownership categories. I happen to be chairman of the National Parks Subcommittee. Park lands are operated differently. We have wilderness areas that are operated differently. But the point I want to make is that many national forest lands are multiple use lands and that is what they were designed to be and indeed can be if they,

I think, if they are managed properly. I am talking about hunting, hiking, visiting.

You know, it was interesting when the roadless proposal came up, the kinds of people that you heard from. You would think first of all it might be those who had direct economic interest, and so on. Not so. For example, we had veterans associations concerned about how people with handicaps were going to be able to visit their forests and those kinds of things. So I think the impact is very broad and it is very important to consider how best to manage these resources.

I think the policies from the Forest Service certainly need some review. We have sought to do that. Since 1998 the agency has proposed a number of management regulatory changes. Just to name a few, the National Forest System Road Management and Transportation System Policy—that is all one title. Forest planning regulations, roadless area reviews, Strategic Plan for Government Performance and Results Act, final interim rule on roadless areas, fuel reduction policy, draft environmental impact statement for Interior Columbia Basin, ecosystem management project, cost recovery for special use applications, unified Federal policy for insuring a watershed approach to Federal lands, to name a few. And I think one of the difficulties is that these have not always been related to one another and worked in a cooperative kind of way but have sort of been thrown out there.

I was particularly, I guess, impressed and negatively impressed with the roadless proposal. This policy came from Washington in kind of an announcement to apply to all lands. At the same time, each of the forests has their own forest study, which they do periodically for their own forest plan, which would have been the logical way to take a look at roadless areas but, instead, that was declared from here. We went to the meetings. I went to some of the meetings that people were interested in. There were really no detail available to the people who came to a so-called hearing and they had no chance to really react.

So these are the kinds of things that I think ought to be changed. I believe these policies have been largely implemented and run by the assistant secretary over in the Department of Agriculture—not by the professional foresters—and that is too bad. Small businesses are involved, of course, in recreation, in tourism, in guiding and hunting and ranching and forestry, mineral exploration, all these kinds of things, which are very important to our economy.

So Mr. Chairman, I do think all of us need to take a look at how we can better implement Forest Service policies, how we can take some of the regulatory burden off small business, how we can provide more access to these public lands for the various kinds of uses and, at the same time, protect the resources.

I appreciate what you are doing and thank you for the opportunity to be here.

Senator ENZI. Thank you.

Senator Craig.

STATEMENT OF THE HONORABLE LARRY CRAIG, A UNITED STATES SENATOR FROM IDAHO

Senator CRAIG. Chairman Enzi, thank you very much. Let me also thank Senator Crapo and Senator Burns.

I also want to commend Chairman Bond for allowing the Small Business Committee to hold these hearings on the role of the U.S. Forest Service in dealing with small business. I am especially pleased to be joined here at the table this morning with Senator Craig Thomas, who has played an active role with me, as has Senator Burns, on a variety of committees that have jurisdiction over the U.S. Forest Service.

Since 1995, I have chaired the Subcommittee on Forest and Public Land Management of the Committee on Energy and Natural Resources, Mr. Chairman. That Subcommittee has primary jurisdiction over the programs and operations of the U.S. Forest Service. During the 104th Congress and in the current Congress, I also chair the Subcommittee on Forestry, Conservation, and Rural Revitalization of the Committee on Agriculture, Nutrition, and Forestry. So I have had the opportunity, as chairman of those two Subcommittees, to look at the broad jurisdiction and also the narrow focus that we have given to the U.S. Forest Service.

During those chairmanships I and many of you have joined with me, have held over 100 oversight hearings on the programs and policies of the U.S. Forest Service. As it relates to the interests of this Committee and the subject of this hearing, our oversight record suggests two fundamental conclusions.

First, the U.S. Forest Service is likely the single most important agency affecting small businesses in the rural areas of my State and all of your States and most of the western States of the United States. The Forest Service's programs and policies essentially determine the success or failure of logging, road maintenance and other land management service contractors. The Forest Service basically controls the marketplace for recreation outfitters, hunting and fishing guides, visitor concessionaires and resort owners dependent upon the use of the national forests. The economic health of small service establishments in public lands dependent communities is inextricably tied to the national forests and the surrounding area.

In short, while other Federal agencies like the Small Business Administration have programs to help these businesses, the Forest Service determines the future of these businesses.

My second conclusion is that there is not an agency in the Federal Government that is less sensitive to the needs of small business. The Forest Service operates in a milieu of constant conflict among powerful, national interest groups over resource management direction and priorities. Small business entities are poorly organized, diverse in their views, and generally are ignored in the ongoing debate.

Worse, the Forest Service has moved actively to minimize and, in some cases, even eliminate the limited opportunities and considerations that other Federal agencies routinely afford small business interests to access and influence their programs.

For example, the agency has taken the position that its land and resource management plans are not agency rules subject to the re-

quirements of the Small Business Regulatory Enforcement Fairness Act. The Forest Service persists with this unlawful and exclusionary position notwithstanding clear case law to the contrary. Clearly, the agency is of the view that it is up to small business to petition the court to force the Forest Service to meet its obligations under the law.

Further, to say that the Small Business Impact and Regulatory Flexibility Act analyses accompanying Forest Service rulemakings are cursory would be to award the agency an unintended compliment. These analyses are typically nonexistent. I have not reviewed a single Forest Service rule over the past 5 years which contained an analysis of this sort which could withstand judicial scrutiny. But here again, the agency is depending on the limited means of small business to seek judicial intervention to correct a constant pattern of lawlessness.

Any reasonable effort to complete these analyses would easily highlight problems created for small business. For example, in the case of recreational outfitters, the Forest Service has regulations which severely constrain the ability of these small businesses to operate in a reasonable business environment. Many visitors to the public lands would not be able to enjoy them without the assistance of outfitters and guides. The outfitters who provide important guide services to visitors to our National Forests are required to have a permit and to pay a share of their revenues to the Federal Government. But these small businesses are not offered permits on a reasonable, long-term basis. Rather, they must expend the time and energy to secure their permit on an annual basis, subject to revocation at any time. You can imagine the impact such regulations have on outfitters and guides when they try to get a loan to buy new equipment or to sell their small businesses.

Perhaps most troubling have been the reports that, through programs like the Recreation Fee Demonstration Program, the Forest Service has attempted to supplant small businesses with government enterprises. The Recreation Fee Demonstration Program is a pilot effort which allows the Forest Service to charge recreation user fees for some sites and retain those fees for agency purposes. We have received a number of complaints from concessionaires that the Forest Service is using this authority to drive their businesses away from the most popular Forest Service recreational sites so that they can be managed for the agency's financial gain instead of the concessionaire or the local business person. As a result of these complaints, we have so far refused to make this fee collection authority permanent, pending further oversight.

Lastly, unlike other Federal agencies—for instance, the Environmental Protection Agency—that manage large programs that impact small businesses, the Forest Service has neither appointed a small business liaison within the agency, nor assigned this responsibility to any office within the agency. Indeed, I believe your hearing will uncover evidence that there is very little sensitivity to, or understanding of, the needs of small businesses anywhere in the U.S. Forest Service.

As one outcome of the hearing, I would like to work with this Committee to assure that we are successful in creating an independent Office of Small Business Advocacy within the Forest Serv-

ice itself. That office should be given the opportunity and the responsibility to approve both Small Business Impact and Regulatory Flexibility Act analyses before any final regulation leaves that agency.

Again, Mr. Chairman, those are my views based on the experience we have had in examining this agency upside down and inside out for the last good number of years. So I hope that once again your effort and this Committee's efforts will expose what some of us have known and what we hope the country can understand—an agency now that pays little attention to the responsibility it has had and has within the law to the small communities that surround it.

It is tragic to me that somehow in the mix of what has happened over the last decade the word commercial value is of disdain on the lips of the U.S. Forest Service. But it is today and as a result of that the biases that I think are reflected in the actions they have taken are clearly anti-business, anti-small business, and therefore anti-West and anti-rural America. Thank you very much, Mr. Chairman.

Senator ENZI. Thank you very much. I thank each of you for your testimony this morning. I particularly thank you for the leadership that you demonstrate on this issue every day. I want to again thank you for taking time out of your busy day to testify and also your agreement to take the results from this hearing and use them for your work on this issue. Thank you very much.

Now while the second panel is taking their place at the table I will do a brief introduction, but I have to mention that the three of us that are here today are in our home States almost every weekend traveling a different part of the State, talking to people that are actually dealing with the problems. This is a delightful panel because these are the people that we talk to when we are in our respective home States. They give us some good, common-sense ideas for things we can do; which we bring back here. The usual reaction is "That is too simple; it will not work." But we manage to complicate them. We have some people here that will give some of those on-the-ground opinions.

We have Jim Hurst, who is the president of Owens & Hurst Lumber Company of Eureka, Montana. We have Joel Bousman, who is a cattle rancher from Boulder, Wyoming, and the regional vice president of the Wyoming Stockgrowers Association. We have Del Tinsley, who is the owner and publisher of the Wyoming Livestock Roundup in Casper, Wyoming. Mr. Tinsley is also a member of the Advisory Board for the University of Wyoming College of Agriculture in Laramie, Wyoming. And we have Al Bukowsky, who is the owner/operator of Solitude River Trips in Salmon, Idaho.

Mr. Hurst.

**STATEMENT OF JIM HURST, PRESIDENT, OWENS & HURST
LUMBER CO., INC., EUREKA, MONTANA**

Mr. HURST. Senators, thank you for inviting me. My name is Jim Hurst. I own and operate a small mill in Eureka, Montana, where I have been a life-long resident.

To get directly to the point, the impact of current and proposed U.S. Forest Service policies and regulations are and will continue

to be devastating to small timber-related companies and the rural communities where they are located unless changes are made soon.

Please note that I speak not only for my company but for my employees and a significant number of the residents of Eureka and Lincoln County, Montana. We offer a dire picture of what the Forest Service is doing to small businesses and families in our community.

Last Thursday I was forced to lay off approximately 60 percent of my workforce. A copy of my lay-off notice stands before you.

[The notice follows:]


OWENS & HURST LUMBER CO., INC.

Crew List for Single Longside Shift
Effective 10/2/00

Because of continued poor market conditions and an insufficient supply of green logs, as anticipated in our notice dated 7/12/00, Owens & Hurst will curtail operations to a single longside shift starting 10/2/00. The work schedule for this shift will be Monday thru Thursday starting at 6:00 a.m. and ending at 4:00 p.m. The following employees will be given their job assignments and scheduled shifts by their supervisor:

Jerry Ambrose	George Paine
Jim Butts	Roger Pillsbury
Floyd Carvey	Dave Purdy
Mark Fowler	Greg Rieben
John Garrison	Don Roberts
Tag Garrison	Earl Russell
Grant Hammond	Steve Sanders
Rod Henderson	Joel Sieler
Duard Johnson	John Soderling
Buck Kessler	Larry Stevens
Scott Kirkedahl	Jim Thompson
Larry Larson	Andy Torres
Mick Lewis	Dale VanBemmel
Mark Lund	Craig VanDeHey
Tim Mikita	Bill Vanleishout
Ron Morgan	

If you are not on the above crew list and would like to work one day a week during the layoff, you may sign up in the office. The signup sheet will be available in the office until 9/28/00 for work on Fridays starting 10/6/00. This will not disqualify you from receiving unemployment benefits. We will post the phone number and all the information needed to apply for unemployment benefits next week.


Larry Hanson

LH/js

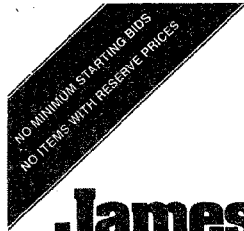
Mr. HURST. The names not on this list represent 60 jobs in a small community where my firm was the largest employer. Forest Service policies in conjunction with the likes of NEPA, the Endangered Species Act, road obliteration mandates, etc., are primarily responsible. As these anti-harvest measures intensified, coupled with an onslaught of appeals by the environmental industry, our forest, the Kootenai, has sold only 25 percent of historic levels. In short, Federal dictates are literally sucking the blood out of rural, timber-dependent communities in Montana.

We are a small independent mill. Our adversaries are big government, big environmental organizations and big business, which present us with a bit of a challenge to merely stay in business. As I mentioned, harvest volumes from the forest have greatly decreased.

My instincts tell me that the system works like this. The big environmental groups influence big government to promote a zero or reduced harvest. Big timber companies that have their own private forests do not intervene because closing the National Forests to timber removal increases the value of their own holdings. The result is the extermination of the small firms who have deep roots in their communities.

An example of this is the closure of the American Timber Company. I attended its auction 2 weeks ago. That notice is here before you.

[The notice follows:]



James G. Murphy Co.

Commercial/Industrial Auctioneers



AUCTION CATALOG

Thursday, September 12-13, 2000

Mr. HURST. When that family-owned small business closed after 54 years, 145 people lost their jobs. The auction sold what was left for 2 cents on the dollar. Another independent company gone forever and for no good reason, as we have clean air, clean water, abundant wildlife and literally millions of acres of dead, down and disease-infected timber that needs treatment—a resource that could be processed into lumber for our Nation instead of providing citizens with the annual Montana firestorm event.

Driving us out of business only enhances the opportunities for big business to buy what U.S. Forest Service timber is offered at bargain basement prices because of a lack of competition and would provide big government an opportunity to ride in on a white horse and offer to relocate us or retrain us. Problem is, many of us do not want to leave. Many will stay and live in poverty rather than leave their homes. I realize this may be a simplistic view but I believe it hits the mark.

I have a Native American friend who, when referring to the Federal Government's treatment of rural Westerners, said, "You are the new Indians. First they take away your land and your way of life. Then they say, 'Trust us.'" The fact is we do not trust our national government anymore and it is quite evident our government does not trust us.

As far as we are concerned, the Federal Government has turned its back on rural resource-dependent communities. It ignores the locals who live, work, recreate in, care for and understand our forests. Instead, the "Wizards of Washington" know what is best for us. They allow massive build-ups of fuel in our forests, yet removing this fuel is currently not an option. Local, on-the-ground decisionmaking would not allow this to happen.

Are Forest Service policies negatively affecting small business in rural communities? You be the judge. The Montana Hunger Coalition fact sheet states 14 percent of Lincoln County residents are living in poverty; 28 percent are poor and at risk for hunger. And that was before my lay-off.

Statewide, since 1994, Montana has led all 50 States in the rate of increase in poverty. While poverty has been on the increase, the rate of unemployment has been low. This is ludicrous in a State with an abundance of natural resources and with a population willing to work.

The report states that while Montanans are working harder than ever, they nevertheless lead the Nation in the rate of increase in poverty mainly because of a deterioration in wages in agriculture and the extractive industries and an increase in low-wage sector jobs.

I have brought with me letters from the mayors of Rexford and Eureka, Montana, further describing the negative impact of Forest Service policies on their towns. I hope you will include these letters in the record of this hearing.

In Eureka, Montana, the U.S. Forest Service has an opportunity to prove its worth. It can care for the land and serve the people by immediately selling the estimated 150-million board feet of timber that have been burned within 15 miles of our town. Harvest the trees while they have value and in the process, grind the limbs and tops into the ground to stabilize the soil and also stabilize our

way of life for another 3 to 4 years. A momentary stay of execution until we can determine if sound science, reasonable decisions and common sense will once again be the trademark of the U.S. Forest Service. If no stay is forthcoming, I would personally prefer lethal injection.

If nothing else, I would hope the Forest Service and the Federal Government would look at small business with the realization that some of their oversights and the intended and unintended consequences of their actions are destroying us one by one. If nothing is done to advance our cause, it should be noted that some day this country will desperately need us, but we will not be here. Thank you.

Senator ENZI. Thank you very much.

[A subsequent submission for the record from Mr. Hurst follows:]



OWENS & HURST LUMBER CO., INC.

10-10-00

Karen Brzuch

Karen,

Enclosed are a handful of letters I forgot to drop off, please do what is normally done with them.

Also, when Senator Burns questioned me as to what would help my company the most I failed to mention that short term, selling the recent fire killed timber is the most important by far. If you would be kind enough to enter this in the record of the hearing I would be grateful.

Thanks again,
Jim Hurst

Mr. ENZI. Mr. Bousman.

STATEMENT OF JOEL E. BOUSMAN, CATTLE RANCHER, BOULDER, WYOMING, AND REGIONAL VICE PRESIDENT, WYOMING STOCKGROWERS ASSOCIATION, CASPER, WYOMING

Mr. BOUSMAN. Mr. Chairman, Members of this Committee, my name is Joel Bousman and I am a cattle rancher and regional vice president of the Wyoming Stockgrowers Association. My wife, Susan, and I, along with our son, Jim, and his wife and daughter, and our son, Cotton, operate a cattle ranch in western Wyoming. My sons are the fifth generation of our family in the ranching business in Sublette County. Our cattle ranch is an independently owned and operated small family business.

After college I returned home to Boulder, Wyoming, and I bought 1,600 acres and the Federal grazing permits from my father. My wife and I did the work and we started to build both our family and our family ranch. In the summers we packed up the kids, the tent and the lunch cooler and we all headed to work in the hayfields for the day. To make ends meet, we worked the ranch together as a family.

My children recognize that our family ranch is a real business opportunity with high-stake risks. The Federal Government could put us out of business with nothing more than the stroke of a pen.

Grazing on Forest Service land is critical to my operation. If you will refer to the map up here, please, that is a map of Sublette County in western Wyoming. (See Page 40.) Jackson Hole is just to the northwest. Sublette County is about the size of the State of Connecticut. Both shades of the green on the map are Forest Service land. Yellow is administered by the Bureau of Land Management, blue, the State of Wyoming, and the small amount of white you see in the river corridors is the private land in Sublette County.

Sublette County is only 20-percent private property. Livestock are on the private land during the winter and the spring until the new grass begins to grow. The ranchers, with BLM permits, pasture their cattle on the BLM land through June. Meanwhile, on all the privately-owned land, the irrigated hay land, the crops are being grown for the hay that is to be needed to get through the next winter.

When the Forest Service range is ready for grazing in July, livestock are then herded into the higher mountain pastures until early fall. Two hundred and thirty-eight head of our 350 mother cows graze a common Forest Service allotment from July 1 till September 15.

If our ranch loses our forest permit we would have the option to downsize our ranch or try to find other grazing land. If we downsize our small business, we would not be economically feasible and my sons would be unable to join me in my business. Purchasing private pasture in this case is not a realistic option because if you can see on the map, there is so little private land available in the county where I live.

Another option would be for me to sell out to the highest bidder, likely a subdivision developer. Our land is at the foot of the Rocky Mountains and some of my neighbors have already chosen this op-

tion. I could sell and try to move elsewhere to ranch or just retire. I would have to give up my home in Boulder and the family business I have created, and I would sacrifice my hope and my dream to pass my family ranch on to my children.

The threat to my grazing permit is not due to negative range conditions. I use scientific range monitoring. These lands are in good condition. Rather, the threat is from Federal regulations. The Forest Service often ignores the mandates from Congress to manage for balanced multiple use. Some of the nongrazing regulations that are harmful to our business include the endangered species regulations, the roadless initiative and Forest Service road policy and the Forest Service planning process itself.

For example, 3 years ago on our ranch's grazing allotment the Wyoming Game and Fish and the Forest Service tried to restrict grazing. Their plan was to reduce livestock grazing while placing Colorado cutthroat trout in an intermittent stream. We were forced to spend a great deal of time and effort with scientific experts and fish biologists. Since the stream was intermittent, it had no water in it part of the year. The scientific experts finally convinced the fish biologists that fish cannot live without water. Can you imagine that?

The time, energy and expense required to stay informed and respond to so many regulations and proposals hurts my ability to improve my operation. In the last year I estimate I have spent 15 working days and \$1,700 responding to regulations.

What difference does it make if increased regulations force me out of business? Critics of Federal lands livestock grazing fail to mention how important private lands are for wildlife. Like livestock, the majority of wildlife survive the winter on private lands. Ranchers provide winter forage, water and shelter for wildlife. Almost 100 percent of Wyoming moose make their winter home on private land. When a ranch is forced out of business there is a public cost, a public loss.

For discussion purposes, let us look at a conservation easement that mandates no development. In Sublette County, a conservation easement attached to a ranch will reduce the market value by 40 to 50 percent. The open space and the wildlife habitat—in other words, the public value—would then be contained in the remaining 50 to 60 percent of the value of the ranch.

Six years ago my son Cotton, then 14 years old, came here to Washington, D.C., to participate in a town meeting with President Clinton. Cotton talked about the importance of Federal grazing lands and the increasing costs imposed by government regulations and specifically the nonfee costs.

Now, 6 years later, I am here testifying before this Committee about the impact of Forest Service regulations that still are threatening to take away both his dream and my hopes. Members of this Committee, I can assure you this situation has not improved in the last 6 years. Thank you.

[The prepared statement of Mr. Bousman follows:]

Testimony of

Joel E. Bousman
Boulder, Wyoming

**Impact of Current and Proposed U.S. Forest Service
Policies and Regulations on Small Businesses
"The U.S. Forest Service: Taking a Chainsaw to Small Business"**

before the

Senate Committee on Small Business
The Honorable Christopher Bond, Chairman

October 4, 2000

October 4, 2000

Joel E. Bousman
P.O. Box 74
Boulder, WY 82923

Congressional Testimony

Introduction

Mister Chairman, members of the Committee, my name is Joel Bousman and I am a cattle rancher and regional vice-president of the Wyoming Stockgrowers Association. My wife, Susan, and I along with our son, Jim, 25, and his wife and daughter, and our son, Cotton, 21, operate a cattle ranch in western Wyoming, Sublette County. These sons of ours are the 5th generation of our family in the ranching business in Sublette County and our granddaughter is the 6th. Our cattle ranch is an independently owned and operated small family business. The only outside labor required is during the harvest season, when we put up native hay to feed our livestock through the long winter.

After I graduated from college and returned home to Boulder, Wyoming, I took out my first loan from the bank, and bought 1600 acres from my father. My wife and I did the work, as we continued to build both our family and our family ranch. In the summers, we packed up the kids, the tent, and a lunch cooler and all headed to work in the hayfields for the day. This was the only way we could make ends meet, to work the ranch together as a family.

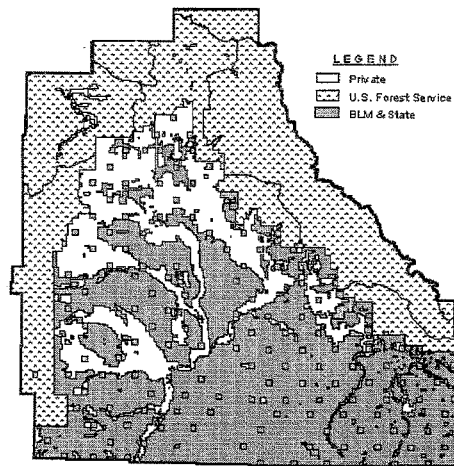
When my children reached high school, I took out another long-term investment loan and bought 1800 acres, which more than doubled the size of our private property holdings. Our ranch is still considered small in Wyoming. I knew the ranch would have to grow if I ever wanted my children to be able to come join the family business. This was my hope, my dream.

My children are growing up and have opportunities to go anywhere and make more money than they can on our family ranch. The entire community is aging, and many kids simply are not coming back home. Our kids are entrepreneurs; they are willing to take risks, and they recognize that coming back home to work the family ranch is a real business opportunity with high stake risks—the federal government could put us out of business with just a few strokes of the pen.

USFS Grazing Critical

To understand why grazing on this USFS land is so important to my business, as well as other family ranches in my community and across Wyoming, it is necessary to appreciate the intermingling of land ownership and the interdependencies between them.

Figure 1. Sublette Co. WY Land Ownership



Sublette County, Wyoming, where I live, is only twenty percent (20%) private property. This privately owned property is the irrigated cropland and a small portion of the upland pastures in the county. Livestock typically remain on the private land from October 1, through the winter months, until the new grass is established, in May. The ranchers, with BLM permits, will pasture their cattle or sheep on BLM land until the last part of June or the middle of July. During this time, their privately owned, irrigated, cropland is growing the hay needed for the next winter. Sometime in July, when the USFS range is ready for grazing, the livestock are herded to the higher pastures and remain there until early fall, September 15/October 1.

Cycle of Forage Production and Use			
Land Ownership	May and June	July - October	October-April
Private Lands	Growing Hay	Growing Hay	Feeding Hay
BLM Lands	Grazing	Resting	Dormant
USFS Lands	Resting	Grazing	Dormant

This is a natural cycle for our geographical area. Wintering the livestock on the lower grounds (private property); early summer grazing on BLM land; mid to late summer grazing on the higher mountain pastures (USFS land); while the ranchers finish growing and harvesting the hay crops.

Since private land in Sublette County is minimal, it is a deciding economic fact that ranchers must have a place to graze their livestock through the summer so that the ranchers can produce the hay necessary to sustain the cows and sheep during the winter.

Grazing on land administered by the United States Forest Service (USFS) is critical to our cattle operation. Two hundred and thirty-eight (238) head, of our three hundred and fifty (350) mother cows, graze the pasture on a common USFS allotment, from July 1 through September 15.

Utilizing this pasture on the USFS lands is not only critical to our family business but to the agriculture economy of our community and the entire state of Wyoming. Just in Wyoming, there are seven-hundred and fifteen (715) permittees who are allowed one-hundred seventeen-thousand (117,000) cattle and one-hundred forty-two thousand (142,000) sheep to pasture on six-million four-hundred thousand (6,400,000) acres administered by the USFS. This constitutes a very important contribution to the stability and vitality of Wyoming's rural communities.

Another aspect that shows the importance of my USFS permit is my annual operating loan. Every year, I borrow money from the bank to operate my business until I can sell my steer calves in the fall, which is how I generate income. When the bank calculates the value of my loan, they look at my ranch's potential to generate income. If the connection between my private land and federal permits is broken, my potential to generate income will be severely limited and I would not be able to borrow the money to operate.

Options For My Business

If our ranch loses our permit to graze on the USFS land, we would have the options to (1.) downsize our small family operation or (2.) try to find other grazing land. If we downsize, our small business simply cannot remain economically feasible, my sons would be unable to join me in the business, and to me this is not a realistic option. Finding other grazing land, purchasing private pasture, for example, is a virtually impossible option in our area because, again, our county is only 20% privately owned and little is available for lease.

One other option is for me to sell to the highest bidder, likely a subdivision developer. Our land is at the foot of the Rocky Mountains and some neighbors already have chosen the development route. I could do that and try to move my ranching operation elsewhere or just retire. With either of these options, I would have to give up my home in Boulder and the family

business that I have created out of that home. I would also be sacrificing my hope to pass my family ranch on to my children and my grandchildren, even as they already are beginning to take the reins.

Non-grazing Regulations Threaten Grazing Permits

My USFS grazing permit, as well as the permits of my neighbors, in Wyoming and across America, are severely threatened. This threat is not due to negative range conditions. Many permittees participate in range monitoring and insist that this monitoring be scientifically valid. These lands are in good condition. Rather, the threat is to non-grazing regulations that force us to abandon our permits. The USFS often ignores the mandate from Congress; the mandate to manage for balanced multiple use when creating these regulations. When I study the regulations, there often seems to be a lack of sound science and credible data used in the regulatory process.

Some of these non-grazing regulations that have a harmful impact on our business include: threatened and endangered species regulations; the roadless initiative and Forest Service road policy; and the USFS planning process.

Threatened and endangered species regulation. My family and I work hard to conserve wildlife because it's part of the land that we love. Heavy handed, top-down government regulations, however, often have unintended consequences. Three years ago, on our ranch's USFS allotment, there was an attempt by the Wyoming Game and Fish Department in conjunction with USFS officials, to restrict grazing in a portion of our allotment. Their plan was to reduce livestock grazing while placing Colorado Cutthroat trout in an intermittent stream. We were forced to spend a great deal of time and effort with scientific experts and fish biologists. The scientific experts finally convinced the fish biologists that fish can not live without water, and

there was no water in the stream a part of the year. In this situation, cattle grazing had no effect on fish habitat.

The Endangered Species Act, alone, has cost a neighboring sheep ranching family over fifty-thousand dollars (\$50,000) in actual loss of breeding sheep and market lambs to wolves and grizzly bears during the past five years. The U.S. Fish and Wildlife Service endangered species regulations override USFS management policies. This causes the USFS to manage for single species as opposed to the mandate by Congress to manage for balanced multiple use.

Roadless initiative and Forest Service road policy. The proposed roadless initiative is much more complex than "just closing a few roads to protect the forest." The threat comes from how the Forest Service determines what is compatible with a "roadless characteristic." This initiative thus carries regulations that are a threat to my grazing allotment and allotments throughout Wyoming. For example, fences, which are necessary for proper range management and livestock distribution, may not be in accordance with a roadless characteristic, and the fences would have to be removed. And then what would happen to the livestock?

The largest USFS allotment in the United States is located on the Upper Green River in Sublette County Wyoming. Thirteen family ranches graze 7,596 head of cattle on this allotment from June 15 through October 15. The effect of the roadless initiative could eliminate the ability of the permittees to maintain the fences that require vehicle access to maintain, and may eliminate the fences all together. These families could no longer effectively continue to manage the livestock on this allotment.

Water developments used by cattle and wildlife also may not be in accordance with the vague definitions of the proposed initiative. The ability of permittees to create and maintain these improvements needed for environmentally and economically sound grazing practices will be

impaired. As the improvements depreciate, wear out, or are taken out, the use of the grazing permits are no longer economically feasible.

The roadless initiative continues to be a concern not only for federal land ranchers and natural resource users, but also for sportsmen and recreational users of USFS lands. Many people, including me, view the roadless initiative as an attempt by the present administration to circumvent the authority of congress and create more "de-facto" wilderness.

USFS planning process. The USFS planning process, itself, is another threat to the continued use of these permits. Proposed new planning regulations increase uncertainty in a ranching business. Multiple levels of planning and review, i.e. forest plans, activity plans, or allotment plans, create further uncertainty and destabilize small family ranching businesses. On top of the planning process, USFS also has proposals such as the federal unified watershed policy proposal and USFS transportation proposal.

What concerns me about these proposals is that the agency has not undertaken any type of cumulative analysis. That is, there has been no analysis by USFS on how the cumulative impact of all these proposals will interact with each other, what type of burden they will impose on society, on individuals, on ranchers and their family businesses, other affected businesses, and the local community. The USFS has not conducted any type of evaluation of the economic costs of these proposals. This is something that must be completed.

The time, energy, and expense required to keep informed and respond to so many regulations and proposals has jeopardized my ability to continue to find even better ways to improve rangeland health and wildlife habitat as well as operate my business. Just in the last year, I estimate that I have spent fifteen workdays and seventeen-hundred dollars responding to these regulations. And is it all worth it when the final rules come out that show little attention

was paid to the comments others and I provided? I keep trying because it is the only hope I have of staying in business.

What Difference Does It Make

What difference does it make if increased rules and regulations leading to the closing of USFS grazing allotments forces livestock operators out of business? Critics of federal lands livestock grazing say that the lands should be reserved for only the wildlife, but they fail to mention how important the private lands are for wildlife. I spoke before about the livestock grazing cycle which is also the cycle for much of the wildlife. Wildlife inhabits the uplands for longer periods than livestock, sooner in the spring and later in the fall, but the majority of the wildlife survive the winter on private lands. Wildlife managers use both the public and private lands to make a feasible year round wildlife habitat.

Ranchers provide open space for wildlife as well as winter forage, water, and shelter, mainly along the river bottoms. Almost 100% of the Wyoming moose make their winter home on private land. Wildlife suffer when ranchers are forced out of business due to government regulations and former ranch land is developed.

When a ranch is forced out of business because of not meeting all the burdensome government regulatory requirements, there is a public cost, a public loss, with the loss of open space and loss of wildlife habitat. The value of this loss may be calculated by comparing the value of a ranch with a conservation easement attached to it to the value of the same ranch without the conservation easement. With an easement, the open space and wildlife habitat can be conserved because the easement can mandate that no development take place. At the same time, the value of the ranch is significantly reduced because the development rights have been sacrificed. In Sublette County, where I live, a conservation easement attached to a ranch will reduce the market

value of that ranch by 40 to 50%. For discussion purposes, if we look at that 40 to 50% as the value of the development rights, then the open space and wildlife habitat -- as well as the loss to the public due to development -- would be worth 50 to 60% of the market value of the ranch.

An Uncertain Future

My cattle ranch business has been operated by five generations of my family and for over 100 years. Six years ago, my son, Cotton, then 14 years old, came here to Washington D.C. and personally explained to President Clinton the interconnection between private and federal lands and the importance of non-fee costs associated with grazing on federal lands.

Cotton has always had the dream of being a cattle rancher and was determined to lessen the governmental threat to his dream. Now six years later, I am here, testifying before this Committee, about the impact of existing and proposed USFS regulations that still are threatening to take away both his dream and my hopes. Members of this Committee, I can assure you that the situation has not improved in the last 6 years. Despite the President's promises, it has only gotten worse.

Senator ENZI. Thank you.
Our next person to testify is Mr. Tinsley.

**STATEMENT OF DEL TINSLEY, OWNER/PUBLISHER, WYOMING
LIVESTOCK ROUNDUP, CASPER, WYOMING, AND MEMBER,
ADVISORY BOARD, UNIVERSITY OF WYOMING COLLEGE OF
AGRICULTURE, LARAMIE, WYOMING**

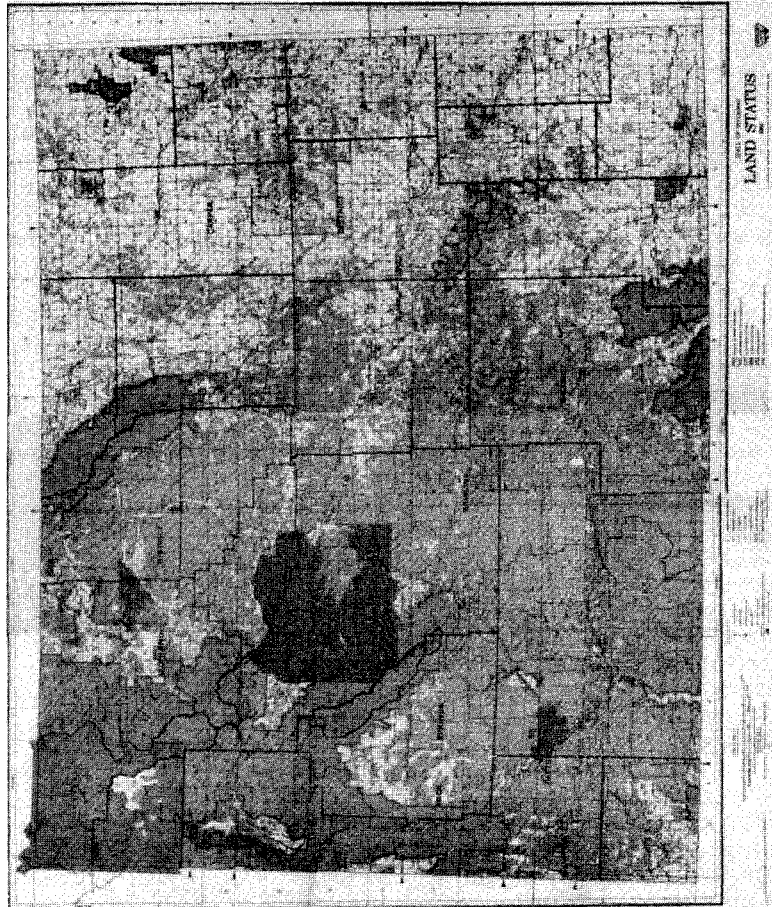
Mr. TINSLEY. Good morning. I want to thank this Committee for the opportunity to testify and represent the great State of Wyoming. I am a Wyoming small businessman. Wyoming is where I raised my three children and where I have been self-employed for the past 25 years. I am a publisher of the Wyoming Livestock Roundup located in Casper. Our subscription base is 85 percent of the people engaged in agriculture in Wyoming.

The message I need to communicate to this Committee today is simple: The State of Wyoming is under attack by the Federal Government. This heavy-handed, regulations-laden government is distorting our wildlife habitat, our open spaces, threatening our culture and forcing our second-, third-, and fourth-generation ranchers out of business.

Virtually all of Wyoming is small business, including ranches. This is why it is so important to tell our story to this Committee.

The Federal Government owns more than 50 percent of the State of Wyoming, as you can see on the map.

[The map follows:]



Mr. TINSLEY. Notice the different colors. The colors indicate the land ownership, including the Federal Government, State and private individually-owned land. The purple represents the National Parks, Yellowstone and Teton, and so forth. The green represents the National Forest. As you can see, we have five National Forests, I believe, in the State of Wyoming. The yellow represents the BLM, and the blue represents the State of Wyoming-owned land, like our school sections and we have a land trust in Wyoming. Orange represents the Wind River Indian Reservation, and the white represents deeded private property. If you look at the map closely you can see that the western part of the State, in my estimation, is more than 85 percent federally-owned.

Well, let me explain the ownership of Wyoming and why it became the way it is. Back in the late 1800s and early 1900s during the Homestead Act, virtually everything on this map that is designated white and yellow was available for homesteading. Homesteaders could claim up to 640 acres. It started at 120 and moved up to 360 and now it is 640 acres because it is getting more arid the further west we go in our development of this great country.

They had to live on the 640 acres for 1 year. One of the conditions was they had to have a wooden floor in their cabin to what they call "prove-up" or to get legal title to the property. But as arid as it is and with water as precious as gold, homesteaders chose to prove-up on lands with live water. If you can imagine bringing your family out West and as arid as Wyoming is, if you look at the drainages in Wyoming you can see that our deeded land is virtually our river bottoms and our creek flows and that sort of thing.

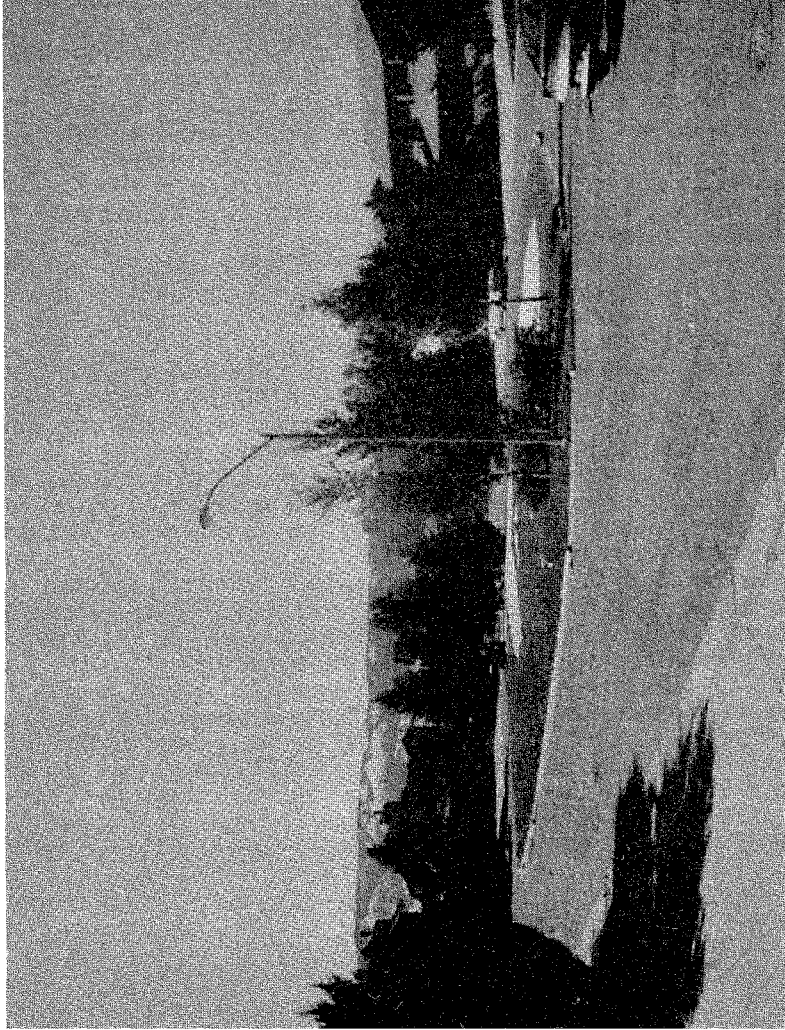
In later years ranchers started accumulating these homesteads and assembling ranches. During that same period the Forest Service started issuing grazing permits on the forest, making these units balanced. They summered on the forest; they wintered on their deeded land.

Today these second-, third-, and fourth-generation ranchers and families are being forced to reduce the number of livestock they can graze on the forests. That, coupled with the high cost of operation, is forcing these stewards of the land out of business. This, in turn, is leaving the deeded base ranch on the river bottoms vulnerable—which is very, very good wildlife habitat—vulnerable to subdivisions. As I mentioned earlier, these are prime wildlife habitat lands. These base operations are also very attractive to the developers because of the beautiful scenery, abundance of wildlife along the creek bottoms, and access to the National Forest.

As a result of these developments, critical habitat is being lost and destroyed forever. The destruction is the exact opposite of what the Forest Service say they are accomplishing by putting ranchers out of business.

The poster to my left depicts what used to be a ranch.

[The poster follows:]



Mr. TINSLEY. The Lathrop Ranch featured about 10,000 acres of open space and critical wildlife habitat. This is the deeded land on this ranch. You can see the mountains in the background. That is where the cattle used to summer. This is critical wildlife habitat that once served as home to wintering cattle, elk, deer, antelope and other wildlife. It is now a subdivision. The people living in the subdivision are now complaining that the displaced wildlife is eating their shrubbery and there are problems. My wife and I go out and walk early in the mornings and we see deer on people's lawns chewing up their vegetation. Well, this was their winter home. The people displaced the wildlife.

The people of Wyoming lose a way of life, a culture, when this is done. But everyone in our Nation loses the magnificent scenery and wildlife habitat that are provided by those ranching families that we are losing.

Keeping the Federal land ownership in mind and coupling it with the fact that Wyoming's population is only 480,000, we soon realize that any change in the use dictated by the Forest Service guidelines dramatically impacts every man, woman, and child in Wyoming. In all 23 counties in Wyoming, there are people living there that have forest permits, including Gosham County, which is in eastern Wyoming on the Nebraska line. There are seven forest permit-holders there. The people of our State depend upon production agriculture and the use of renewable resources—grazing, timber, minerals, wildlife, and open spaces. Forest Service policies that destroy the habitat and the landscapes by replacing ranchers with developments cripple both Wyoming and America.

It was interesting yesterday morning when I picked up our local statewide paper that the Wyoming News Service did a survey and they asked people in Wyoming, "What would you ask at the debate tonight?" Overwhelmingly the people from Wyoming said we would ask, "Why is our Federal Government shutting down our forests?" Its affect is overwhelming. And I am not talking about people in agriculture; I am talking about people on the main streets of Wyoming.

I would like to see this Senate set up a revenue impact study. Instead of an environmental impact study, let us study the revenue and what it is going to cost us to implement all of these regulations and the impact it is going to have on rural Wyoming.

I want to talk just a minute about Yellowstone Park, if you will, please. Four years ago we went on a pack trip and we went through the southern part of Yellowstone Park. We went in the South Gate and made the loop opposite of the way the highway goes through. We rode through the burned areas with 1-million acres of the 3-million acres in Yellowstone National Park that were burned. Today the Canadian thistle, which is a noxious weed, has grown so thick in that country that you cannot ride a horse through it. This is what is happening. They will not spray it; they will not take care of it; but yet they let it burn and it has just done tremendous damage to our economy. It is a very serious situation.

I want to conclude by thanking you for this opportunity to testify. I will be real happy to answer any questions that you may have. I would like to submit some other material with my testimony if I could, please.

Senator ENZI. We will accept anything for the record that you want to add to your testimony. We appreciate the additional information and we will make sure that Members of the Committee have it, too.

[The prepared statement and attachment of Mr. Tinsley follow:]

TESTIMONY OF DEL TINSLEY
 Publisher, Wyoming Livestock Roundup
 before the Senate Committee on Small Business
The U.S. Forest Service: Taking a Chain Saw to Small Business
 October 4, 2000

I want to thank this committee for the opportunity to testify and to represent the great State of Wyoming. I am a Wyoming small businessman. Wyoming is where I raised my children and where I have been self-employed for over 25 years. I am the publisher of the Wyoming Livestock Roundup, a weekly agriculture newspaper, located in Casper. Our subscribers represent over 85% of the people engaged in agriculture in Wyoming.

The message I need to communicate to you today is simple: the State of Wyoming is under attack by the Federal government. This heavy-handed, regulations-laden government is distorting our wildlife habitat, open spaces, and threatening our culture and putting a lot of second, third and fourth generation ranchers out of business.

Virtually all Wyoming businesses, including our ranches are small businesses. This is why it is so important that we are able to tell our story to this committee.

The federal and state governments own more than 50 percent of the land in the state of Wyoming. Notice the different colors on the map. The colors indicate the land ownership, including the federal government, state and private individuals. Purple represents National Parks, Yellowstone Park, Teton National Park, etc. Green represents National Forest, Yellow represents Bureau of Land Management, Blue represents State of Wyoming owned, Orange represents the Wind River Indian Reservation, and White represents deeded private property. If you look at the western part of the state, you can easily see that over 85 percent of it is federally owned.

Let me explain the ownership of Wyoming because it is critical to understanding the disastrous impacts of current federal policy. Back in the late 1800s and early 1900s during the Homestead Act years, virtually everything that is white and yellow was available for homesteading. The homesteaders could claim up to 640 acres and had to live there a year to "prove up," meaning to get legal title to the property. But Wyoming is arid and water was as precious as gold, so homesteaders chose to "prove up" on land with live water. Those early settlers didn't have the ability and resources to develop water, so they chose to claim lands with river bottoms and creek drainage areas, which is also some of our most critical wildlife habitat.

In later years, ranchers started assembling these homesteads making them contiguous ranch units. During that same time, the Forest Service started issuing grazing permits which provides a balanced livestock feeding program, usually with summer grazing on the Forest Service land and winter forage on the deeded land of the river bottoms. To survive, many ranch owners depend upon grazing livestock on Forest Service land to maintain this balanced approach.

Today, the Forest Service is forcing these second, third and fourth generation families to reduce the numbers of livestock grazing on their forest grazing permits. That, coupled with a higher cost of operation, is forcing these stewards of the land out of business. This, in turn, is leaving the deeded base ranch on the river bottoms and drainage areas vulnerable to subdivision. As I mentioned earlier, these lands are prime wildlife habitat. These base operations are very attractive to the developers, because of the beautiful scenery, abundance of wildlife along the creek bottoms and access to

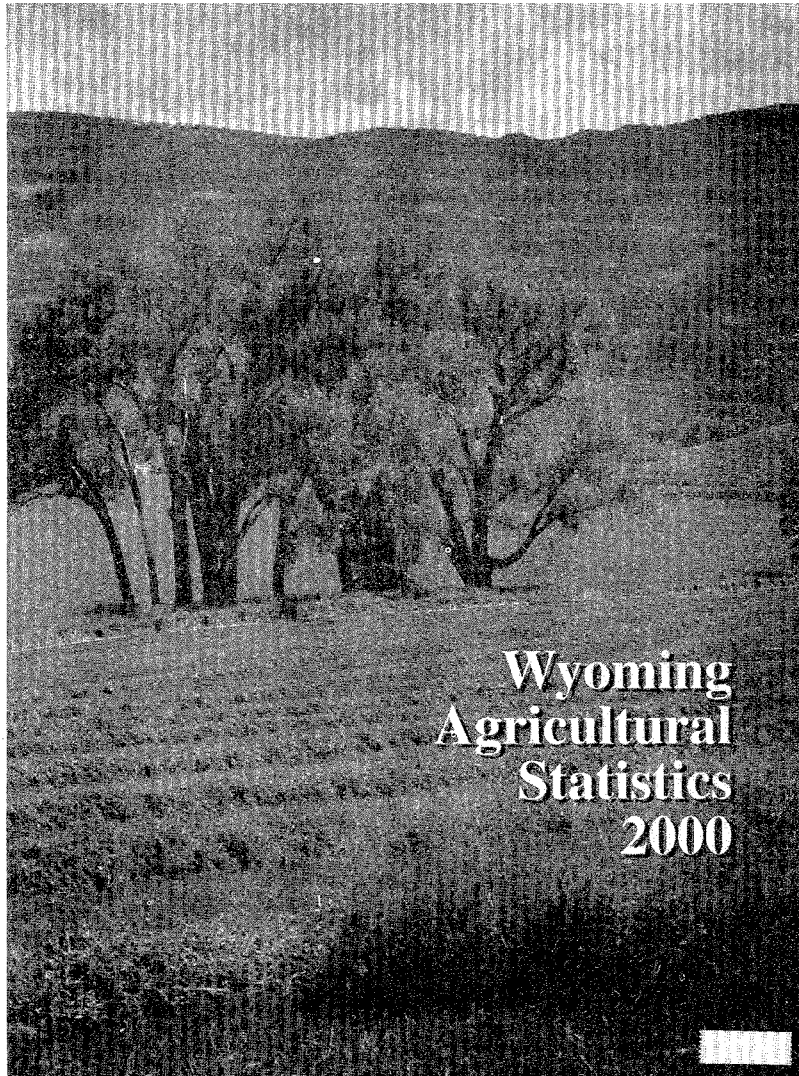
the National Forest land. The buyers of these homes and condominiums being built on the former ranches are mostly second homeowners and retired people from out of state. As a result of these developments, critical wildlife habitat areas are being destroyed forever. This development destruction following ranches put out of business is the exact opposite of what Forest Service officials say they are accomplishing.

This used to be a ranch. The Lathrop Ranch, which was 10,000 acres of open space and critical wildlife habitat. You can see the mountains in the background where there was once a grazing permit. This critical wildlife habitat once served as home to wintering cattle, elk, deer, antelope, and other wildlife. It is now a subdivision. The people of this subdivision are now complaining that the wildlife, which has been displaced, is eating their shrubbery, plants, etc. This is an example of what happens when the Forest Service drives ranchers out of business with the loss of grazing permits. The people of Wyoming lose a way of life, a culture. But everyone in our nation loses the magnificent scenic vistas and wildlife habitat provided by those ranching families.

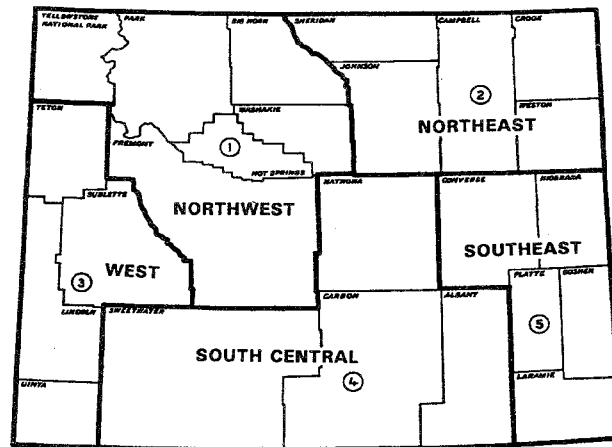
Keeping this ownership in mind and coupling it with the fact that Wyoming's population is only 480,000, we soon realize that any change of use dictated by altered Forest Service guidelines dramatically impacts every man, woman and child in Wyoming, and, eventually, all of us. All 23 counties have people holding Forest Service permits. As a result, every county in our state is affected by Forest Service policies. The people of our state depend upon production agriculture and the use of renewable resources - grazing, timber, minerals, wildlife and open spaces. But all of the people in our nation

depend upon those ranchers to continue to aggressively care for that critical wildlife habitat, those increasingly valuable open spaces, and those tranquil scenic vistas. Forest Service policies that destroy habitat and landscapes by replacing ranchers with developments irreparably cripple both Wyoming small busiensses and the American people.

Thank you for this opportunity to present this testimony, I will be happy to answer any questions.



AGRICULTURAL STATISTICS DISTRICTS



WYOMING AGRICULTURAL STATISTICS SERVICE

Cover picture courtesy of University of Wyoming, College of Agriculture

WYOMING AGRICULTURAL STATISTICS 2000

Compiled by:

WYOMING AGRICULTURAL STATISTICS SERVICE

1-800-892-1660

<http://www.nass.usda.gov/wy/>

nass-wy@nass.usda.gov

Richard Coulter
Jerry Thorson
Cindy Adamson
Lance Daugherty
Kim Faircloth
Lynn Gentrup
Michele Burger
Jeanne Lake, Kay Moyer, Jean Pate, and Nancy Worthington

State Statistician
Deputy State Statistician
Agricultural Statistician
Agricultural Statistician
Agricultural Statistician
Agricultural Statistician
Editor
Office Staff

Issued Cooperatively by:
WYOMING BUSINESS COUNCIL

Tucker Fagan
Bill Bunce

Chief Executive Officer
Director, Agribusiness Division

THE UNIVERSITY OF WYOMING

Dr. Steven Horn
Dr. Jim Jacobs
Dr. Edward Bradley

Dean, College of Agriculture
Director, Agricultural Experiment Station
Head, Department of Agricultural & Applied Economics

UNITED STATES DEPARTMENT OF AGRICULTURE
NATIONAL AGRICULTURAL STATISTICS SERVICE

Ronald R. Bosecker
Richard D. Allen
Joseph T. Reilly

Administrator
Associate Administrator and Chairperson,
Agricultural Statistics Board
Deputy Administrator for Field Operations

TABLE OF CONTENTS

	page(s)
Acknowledgements	1
Table of Contents	2-3
Bill Bunce, Wyoming Business Council	4
Dick Coulter, State Statistician	5

WYOMING HISTORICAL AGRICULTURAL STATISTICS

Record Highs and Lows in Wyoming Agriculture	6-7
Crops - Historical Estimates - Acres, Yield, and Production	8-15
Winter Wheat	8
Spring Wheat	9
Barley	10
Oats	11
Dry Beans	12
Sugarbeets	13
Corn	14
Alfalfa and Other Hay	15
Livestock - Historical Estimates	16-18
All Cattle, All Cows, Calf Crop, and Cattle on Feed, January 1 Inventory Numbers	16
All Sheep and Lambs, Breeding Sheep, Lamb Crop, and Wool Production, January 1 Inventory Numbers	17
All Hogs and Pigs, Breeding Hogs, Market Hogs, and Pig Crop December 1 Inventory Numbers	18

GENERAL INFORMATION

Wyoming Agriculture, 1998-1999	20
Wyoming's Rank in the Nation's Agriculture	21
Rank of Wyoming Counties	21
Number of Farms and Ranches	22
Value of Farmland and Buildings, Cropland, and Pasture and Private Grazing Fees	23
Value Added to U.S. Economy by Agricultural Sector	24
Cash Receipts by Commodities	25
Farm and Ranch Production Expenses	26
Value of Production by Commodities	27
County Value of Livestock Inventory and Crop Production	28

WEATHER DATA

Average Monthly and Annual Temperatures, 1999	30
Monthly and Annual Precipitation, 1999	31
Spring Freeze Hazard Table	32
Fall Freeze Hazard Table	33
Precipitation Departures Chart & Drainage Map	34

LIVESTOCK DATA

Narrative	36
Cattle	37-45
Inventory and Number of Operations, 1991-2000	37
Inventory by Class, Wyoming and U.S.	38
Supply and Disposition	39
Production and Income	40
Milk Cows and Milk Production	41
Milk and Cream Marketings	42
County Estimates	43-45
Cattle	43
All Cows	44
Milk Cows	45

(Continued)

Sheep	46-56
Inventory and Number of Operations, 1991-2000	46
Inventory by Class, Lamb Crop and Wool Production	47
Supply and Disposition	48
Production and Income	49
Sheep and Lamb Losses by Cause	50-55
County Estimates - Breeding Sheep	56
Hogs	57-58
Inventory by Class and Pig Crop	57
Supply, Disposition, Production and Income	58
Chickens - Inventory, Egg Production, and Value	59
Bees and Honey	59
Red Meat Production	60

CROP DATA

Narrative & Crop Production Index	62
Acreage & Production by Cropping Practice, 1990-1999	63-65
Wheat - Winter & Spring	63
All Wheat & Barley	64
Oats	65
Corn Production and Value	65
Sugarbeets & Potatoes Production and Value	66
Dry Beans Production by Class & Value	67
Hay, Alfalfa, Other & All, Acreage and Production by Cropping Practice	68
Small Grains & Hay Production and Value	69
Seed Production, Alfalfa & Dry Beans, Acreage and Production	69
Grain & Hay Stocks	70
Winter Wheat Varieties, 1991-2000	71
Barley Varieties, 1993-1999	72

CROP COUNTY ESTIMATES, 1998 - 1999

Small Grains Distribution Maps	74
Winter Wheat	75
Spring Wheat	76
All Wheat	77
Barley	78
Oats	79
Row Crops and Hay Distribution Maps	80
Dry Beans	81
Sugarbeets	82
Corn	83
Alfalfa Hay	84
Other Hay	85
All Hay	86

PRICE DATA

Narrative	88
Prices Received for Cattle and Sheep - Graphs	89
Prices Received by Marketing Year & Months, Livestock and Crops, 1995-1999	90-92
Index Numbers of Prices Received, Monthly, 1995-1999	92
Prices Paid by Farmers and Ranchers, Selected Inputs, April 1996-2000	93
Index of Prices Paid by Farmers and Ranchers, U.S., 1995-1999	93

MISCELLANEOUS DATA

University of Wyoming	94-95
Schedule for Agricultural Statistics Reports	96
Subscription Form	97-98
Where to Find Historical County Estimates	inside back cover

WBC
WYOMING BUSINESS
COUNCIL



300 S. WOLCOTT - SUITE 200
 CASPER, WYOMING 82601
 AGRIBUSINESS: 1.307.237.4992
 MINERALS: 1.307.237.4996
 FAX: 1.307.237.4999 (FOR BOTH)

BOARD OF DIRECTORS 1999

OFFICERS

Jim Geringer, Co-Chairman
 Governor, State of Wyoming
Dave Crum, Co-Chairman
 Chief Executive Officer
 Crum Electric Supply, Casper
Les Ball, Vice Chairman
 Chief Executive Officer
 Corral West Ranchwear, Cheyenne
Roy Whitney, Treasurer
 Chief Executive Officer
 Hammond, Kennedy, Whitney & Co.,
 Wheatland
Dan McMullin, Member
 President (Retired)
 Mini Mart, Inc., Casper
Lynn Friess, Member
 Co-Owner
 Friess Associates, Jackson

BOARD OF DIRECTORS

Clarence Law, Chief Executive Officer
 Elk Country Metals, Jackson
Jeff Sussman, President
 Lion Dryfus Property Group, N.Y., N.Y.
Dick Nelson, President
 1st National Bank & Trust, Powell
Steve Russell, Plant Manager
 Aldila Minerals Technology, Evanston
Michael Kmetz, President
 Integrated Design Engineering, Laramie
Jon Kirkbride, Owner
 Harding & Kirkbride Livestock Co., Meriden
John Kauchich, CEO (Retired)
 Questar Baseline Industries, Inc., Rock Springs
Mike Peters, Director
 Three Five Systems, Tempe, AZ
Tom Perkins, President
 Phoenix Fuel Corporation, Sheridan
STRATEGIC ALLIANCE PARTNERS
 Wyoming State Agencies & Representatives
 Wyoming Economic Devel. Assoc.
 Wyoming Chambers of Comm. Execs.
 Wyoming Assoc. of Counties
 Wyoming Assoc. of Municipalities
 Wyoming Community Colleges & Commission
 Wyoming Barbers Association
 Small Business Development Centers
 Mid-America Manufacturing Tech. Center
 University of Wyoming
 Wyoming Business Alliance/Heritage Fd.

EXECUTIVE STAFF

John Reardon, Chief Executive Officer
Tucker Fagan, General Operations/COO
Joe Di Rocco, Financial Services/CFO
Peter Reis, Human Resources/Support Services
 (Open), Nat'l/Int'l Business & Industries Devel.
Don Costantino, State Business & Ind. Devel.
 (Open), Tourism & Travel
Bill Bunce, Agribusiness
Bob Uglund, Minerals & Energy
Steve Achter, Capital, Infrastructure &
 Community Development
Pamela Groffhaus, Marketing & Communications

E-mail: info@wyomingbusiness.org
 Website: www.wyomingbusiness.org

Dear Reader,

I hope that the year 2000 "Millennium" Edition of Wyoming Agriculture Statistics will serve to be just as useful, as it is historical. The agriculture industry has changed tremendously in the last 100 years and is evidenced by the trends and data that are identified in this document.

This is information that producers should be proud of. To that point, this data gives testament that we can also be proud of the people involved in the agriculture industry throughout Wyoming. There is a lot that can be read into the historical crop and livestock records of years past. The environmental and global conditions that existed during these years were oftentimes hard. The effects of two World Wars, economic depression, recession, and drought are all reflected in these figures. Through all of this, there is a wonderful group of people in Wyoming that remain dedicated to production agriculture.

Wyoming has the finest crop and livestock genetics in the world. Our horses, cattle, sheep, wheat and hay are recognized and often command a premium in a global marketplace. It is this quality, that provides us with the opportunities for profit through diversification, specialization, and economic efficiencies. It is this quality that allows us to provide the worlds finest food and fiber. It is this quality that others emulate.

Please take a few minutes, as you go through the statistical information provided within these pages, to give thanks to the countless producers, farmers, ranchers, cowboys, and sheep herders that "gave it all they had" to ensure our way of life, the reputation for quality that we enjoy today, and for the heritage that they have left us. They have made our lives much easier than they had it.

Therein also lies the challenge...to continue the quest for continual improvement. To ensure that the readers of the year "3000" Millennium Edition of Wyoming Agriculture Statistics share our pride.

Sincerely,

Bill Bunce

Bill Bunce
 Director, Agribusiness Division
 Wyoming Business Council



PO Box 1148
 Cheyenne WY 82003
 1-800-692-1660
www.nass.usda.gov/wy

National Agricultural Statistics Service, USDA

Dear Reader,

We are proud to present the first edition of "Wyoming Agricultural Statistics" in the new millennium. It is testimony to the hard work and dedication of Wyoming's farm and ranch families that agriculture in the 21st century continues to contribute so much to the culture, economic base, and environmental stability of Wyoming. I thank all the agricultural producers who continue to make it possible for us to tell this story of agriculture.

One benefit of having publications like this one that document agricultural activity each year is that it allows us to review changes over time. The changes in agriculture over the last century are many. A few highlights for Wyoming would include the change in number of farms and ranches from a high of 18,100 in 1932 to the current level of 9,200 or about half. Increased productivity would be another highlight with average yields per acre for crops dramatically rising. Winter wheat yields have averaged over 30 bushels per acre in recent years whereas yields didn't regularly reach 20 bushels per acre until the 1940's. Dry bean and sugarbeet yields are about double what they were early in the century. Corn grain yields have made tremendous jumps especially in the last half century.

On the livestock side notable changes would have to include the decline in sheep inventory in Wyoming. Breeding stock peaked at about 6 million head in 1909 and has now fallen below a half million head. Cattle inventory has shown a steady increase albeit on a smaller scale than the sheep decline. Cow numbers have gone from the 300,000 range in the 1920's to over 800,000 head now.

This publication also reflects the hard work of my office staff and NASDA enumerator staff. I thank them. We expanded our local telephone enumerator staff this year and opened a new data collection center in Cheyenne. We are helping other States like Colorado and Nebraska with their survey data collection. This was a big undertaking and we are proud of the facility and staff we now have in place. If you are in Cheyenne, we would love to show it to you.

Here is hoping that the new millennium brings many good things for Wyoming agriculture.

Sincerely,

Dick Coulter

Dick Coulter
 State Statistician

**RECORD HIGHS AND LOWS IN WYOMING AGRICULTURE:
PRICES RECEIVED BY FARMERS AND RANCHERS**

CROPS

Crop	Year Series Began	Record	Marketing Year Average Price		Monthly Price	
			Year	Price	Month/Year	Price
				Dollars per Bu.		Dollars per Bu.
All Wheat	1908	High Low	1995 1952	4.60 .31	May 1996 Nov 1932 & Jan 1933	6.25 .26
All Barley	1908	High Low	1989 & 1991 1932	3.42 .26	Nov 1985 Jan 1933	3.99 .22
Oats	1908	High Low	1988 1932	2.45 .25	Jul 1988 Nov & Dec 1932 & Jan 1933	2.86 .22
Corn for Grain	1908	High Low	1995 1952	3.90 .50	Jul 1996 Nov 1952	4.89 .24
All Dry Beans 1/	1919	High Low	1989 1931	29.90 1.75	Jun 1990 Feb 1933	37.20 1.20
Sugarbeets 2/	1924	High Low	1980 1938	50.90 4.35	(No monthly data available)	
Fall Potatoes 1/	1909	High Low	1997 1932	8.40 .60	(No monthly data available)	
All Hay 2/	1908	High Low	1997 1932	85.00 6.00	Mar, Apr & May 1997 Nov 1932	94.00 5.50

1/Dollars per cwt.
2/Dollars per ton.

LIVESTOCK

Species	Year Series Began	Record	Marketing Year Average Price		Monthly Price	
			Year	Price	Month/Year	Price
				Dollars per Cwt.		Dollars per Cwt.
Beef Cattle	1910	High Low	1993 1933	79.10 5.30	Feb 2003 Dec 1933	83.40 3.05
Beef Cows	1953	High Low	1990 1954	57.30 9.80	Feb 1990 Nov & Dec 1955	60.60 8.20
Calves	1910	High Low	1990, 1991 & 1993 1933 & 1934	101.00 4.40	Mar 1991 Dec 1933	112.00 3.90
Steers & Heifers	1953	High Low	1993 1955	86.70 17.10	Nov 1990 Feb 1956	91.00 14.70
Milk Cows 1/ 2/	1910	High Low	1999 1934	1,280.00 31.00	Mar, Apr & May 1974 Dec 1933 & Jan 1934	480.00 27.00
Hogs	1910	High Low	1982 1933	53.60 3.05	Aug 1982 Jan 1933	61.60 2.25
Sheep	1910	High Low	1997 1932	38.70 2.05	Jul 1997 Oct 1932	46.20 1.80
Lambs	1910	High Low	1997 1932	94.30 4.10	Apr 1997 Nov 1931	102.00 3.60
Wool 3/	1910	High Low	1988 1932	1.65 .08	May 1988 Jun, Jul & Aug 1932	1.80 .07

1/Dollars per head.

2/Monthly prices discontinued in June 1976.

3/Dollars per pound not including incentive payment. Monthly prices discontinued in 1994.

**RECORD HIGHS AND LOWS IN WYOMING AGRICULTURE:
CROP PRODUCTION AND LIVESTOCK INVENTORIES**

CROPS

Field Crops	Year Estimates Began	Record	Acreage		Unit	Yield		Production	
			Harvested	Year		Per Acre	Year	Total	Year
Winter Wheat	1909	High Low	324,000 13,000	1952 1909	Bu. Bu.	36.0 6.0	1995 1919	8,470,000 204,000	1972 1919
Spring Wheat	1909	High Low	232,000 4,000	1928 1991	Bu. Bu.	42.0 8.5	1/ 1919	3,248,000 120,000	1928 1991
Barley	1899	High Low	160,000 1,000	2/ 3/	Bu. Bu.	89.0 8.5	1995 1900	10,560,000 8,000	1985 1900
Oats	1889	High Low	165,000 15,000	1929 1889	Bu. Bu.	64.0 17.3	1995 1919	4,950,000 399,000	1947 1889
Corn for Grain	1919	High Low	140,000 7,000	1935 4/	Bu. Bu.	135.0 7.2	1997 1934	7,620,000 161,000	1998 1953
Dry Beans	1919	High Low	112,000 1,000	1943 5/	Cwt. Cwt.	22.6 3.0	1997 1919	1,328,000 3,000	1947 1919
Sugarbeets	1924	High Low	69,100 23,000	1992 1924	Tons Tons	24.0 9.8	1981 1945	1,437,000 239,000	1992 1924
Fall Potatoes	1900	High Low	34,000 400	1932 1998	Cwt. Cwt.	300 22	6/ 1911	1,980 120	1933 1998
Alfalfa Hay	1919	High Low	660,000 285,000	1999 1949	Tons Tons	2.7 1.4	7/ 8/	1,782,000 412,000	1999 1934
Other Hay	1919	High Low	822,000 460,000	1949 1919	Tons Tons	1.6 0.6	9/ 1934	1,020,000 326,000	1991 1934
1/1989, 1992, 1993 2/1984, 1985 3/1899, 1900			4/1953, 1954 5/1919, 1920, 1921 6/1997, 1998		7/1995, 1997, 1999 8/1924, 1930, 1931, 1934 9/1993, 1999				

LIVESTOCK

Livestock and Wool	Year Estimates Began	Record	January 1 Inventory or Production		
			Unit	Total	Year
All Cattle & Calves	1867	High Low	Head Head	1,690,000 36,000	1975 1867
Beef Cows	1925	High Low	Head Head	874,000 281,000	1993 1926
Milk Cows	1870	High Low	Head Head	78,000 1,000	1934 1/
Cattle on Feed	1930	High Low	Head Head	127,000 6,000	1983 1935
All Sheep	1920	High Low	Head Head	3,972,000 370,000	1932 2000
Breeding Sheep	1867	High Low	Head Head	6,023,000 27,000	1909 1867
Market Sheep	1920	High Low	Head Head	300,000 35,000	1940 2/
Wool	1909	High Low	1,000 Lbs. 1,000 Lbs.	46,973 4,930	1909 1999
Hogs & Pigs 3/	1876	High Low	Head Head	170,000 1,000	1928 4/
1/1870, 1871, 1872, 1873 2/1921, 1922			3/December 1 inventory. 4/1876, 1877, 1878, 1879, 1880, 1881, 1882.		

HISTORICAL WINTER WHEAT ESTIMATES: WYOMING

Year	Pltd	Hvstd	Yield	Prod	Year	Pltd	Hvstd	Yield	Prod	Year	Pltd	Hvstd	Yield	Prod
	1,000 acres		bu/ac	1,000 bu		1,000 acres		bu/ac	1,000 bu		1,000 acres		bu/ac	1,000 bu
1909	13	13	17.8	231	1940	145	115	12.0	1,380	1971	246	219	33.0	7,227
1910	22	21	11.0	231	1941	160	147	23.0	3,381	1972	280	242	35.0	8,470
1911	27	25	12.0	300	1942	168	156	21.5	3,354	1973	295	270	23.0	6,210
1912	35	32	15.0	480	1943	178	158	21.0	3,318	1974	312	288	24.0	6,912
1913	31	30	17.0	510	1944	185	131	11.9	1,559	1975	334	309	25.0	7,725
1914	53	51	16.0	816	1945	192	162	19.0	3,078	1976	330	295	24.0	7,080
1915	60	59	18.0	1,062	1946	213	199	26.5	5,274	1977	327	260	20.0	5,200
1916	64	61	12.0	732	1947	251	235	20.5	4,818	1978	327	275	26.0	7,150
1917	54	46	10.0	460	1948	276	247	20.0	4,940	1979	320	267	22.0	5,874
1918	42	38	14.0	532	1949	288	275	19.5	5,362	1980	325	295	28.0	8,260
1919	35	34	6.0	204	1950	285	270	19.0	5,130	1981	290	270	30.0	8,100
1920	50	45	20.0	900	1951	322	284	18.0	5,112	1982	300	285	29.0	8,265
1921	37	34	18.0	612	1952	361	324	16.0	5,184	1983	320	250	33.0	8,250
1922	38	34	15.0	510	1953	361	314	17.0	5,338	1984	300	260	28.0	7,280
1923	29	24	13.5	324	1954	289	204	11.5	2,346	1985	290	230	22.0	5,060
1924	31	28	14.0	392	1955	263	214	19.0	4,066	1986	290	230	30.0	6,900
1925	46	39	15.0	585	1956	289	238	18.5	4,403	1987	270	240	31.0	7,440
1926	60	58	18.0	1,044	1957	283	257	22.0	5,654	1988	220	195	22.0	4,290
1927	97	85	18.0	1,530	1958	297	267	28.0	7,476	1989	215	193	22.0	4,246
1928	122	110	16.5	1,815	1959	252	227	22.0	4,994	1990	220	205	29.0	5,945
1929	150	132	13.5	1,782	1960	239	211	23.0	4,853	1991	225	200	29.0	5,800
1930	174	148	12.5	1,850	1961	232	203	22.0	4,466	1992	220	200	25.0	5,000
1931	182	142	8.5	1,207	1962	232	187	20.0	3,740	1993	220	200	28.0	5,600
1932	203	132	10.5	1,386	1963	239	211	20.0	4,220	1994	200	180	24.0	4,320
1933	192	96	8.5	816	1964	227	200	22.0	4,400	1995	210	200	36.0	7,200
1934	140	53	8.6	456	1965	261	180	12.0	2,160	1996	230	210	25.0	5,250
1935	120	59	10.5	620	1966	243	221	21.0	4,641	1997	240	225	31.0	6,975
1936	144	45	9.0	405	1967	318	281	28.0	7,868	1998	220	200	32.0	6,400
1937	105	37	11.5	656	1968	296	256	31.0	7,936	1999	200	185	33.0	6,105
1938	112	84	13.0	1,092	1969	266	224	20.0	4,480					
1939	134	108	9.6	1,037	1970	231	196	29.0	5,684					

HISTORICAL SPRING WHEAT ESTIMATES: WYOMING

Year	Plt'd 1,000 acres	Hvstd bu/ac	Yield bu/ac	Prod. 1,000 bu	Year	Plt'd 1,000 acres	Hvstd bu/ac	Yield bu/ac	Prod. 1,000 bu	Year	Plt'd 1,000 acres	Hvstd bu/ac	Yield bu/ac	Prod. 1,000 bu
1909		29	17.8	516	1940	132	99	12.0	1,188	1971	23	18	25.0	450
1910		35	15.0	525	1941	94	89	17.0	1,513	1972	15	12	30.0	360
1911		45	16.0	720	1942	76	70	17.0	1,190	1973	16	11	25.0	275
1912		44	19.5	858	1943	92	84	16.0	1,344	1974	23	18	21.0	378
1913		65	17.5	1,138	1944	97	84	14.9	1,252	1975	25	23	24.0	552
1914		63	13.5	850	1945	94	82	16.5	1,353	1976	40	35	25.0	875
1915		68	19.5	1,326	1946	88	82	19.0	1,558	1977	26	21	20.0	420
1916		90	13.5	1,215	1947	96	91	19.5	1,774	1978	24	19	24.0	456
1917		120	16.0	1,920	1948	108	95	18.0	1,710	1979	21	20	24.0	480
1918		160	20.0	3,200	1949	104	94	16.2	1,523	1980	27	20	18.0	360
1919	167	150	8.5	1,275	1950	83	78	16.0	1,248	1981	17	9	20.0	180
1920	166	156	15.5	2,418	1951	100	91	18.0	1,638	1982	25	24	30.0	720
1921	169	161	12.5	2,012	1952	92	81	17.5	1,418	1983	24	21	34.0	714
1922	145	145	12.0	1,740	1953	110	99	15.0	1,485	1984	25	22	36.0	792
1923	157	149	11.5	1,714	1954	66	48	12.5	600	1985	21	18	26.0	468
1924	118	116	12.0	1,392	1955	70	63	18.0	1,134	1986	29	27	35.0	945
1925	146	139	13.0	1,807	1956	55	45	16.5	742	1987	29	18	25.0	450
1926	184	177	14.0	2,478	1957	34	31	23.0	713	1988	21	13	30.0	390
1927	212	200	15.0	3,000	1958	35	32	22.0	704	1989	20	11	42.0	462
1928	247	232	14.0	3,248	1959	42	34	19.0	646	1990	12	6	28.0	168
1929	218	209	12.5	2,612	1960	35	30	20.0	600	1991	7	4	30.0	120
1930	190	178	11.0	1,958	1961	39	26	17.0	442	1992	17	14	42.0	588
1931	207	75	11.0	825	1962	28	23	24.0	552	1993	18	13	42.0	546
1932	182	123	12.0	1,476	1963	33	30	22.0	660	1994	30	20	35.0	700
1933	180	123	10.0	1,230	1964	23	21	20.0	420	1995	25	20	38.0	760
1934	142	53	11.2	594	1965	29	26	18.0	468	1996	30	26	30.0	780
1935	146	127	11.0	1,397	1966	27	18	18.0	324	1997	20	17	36.0	612
1936	184	83	10.5	872	1967	28	24	24.0	576	1998	14	10	39.0	390
1937	173	145	11.5	1,668	1968	23	18	23.0	414	1999	10	8	36.0	288
1938	196	173	13.5	2,336	1969	19	15	22.5	338					
1939	131	87	12.9	1,122	1970	20	17	24.0	408					

HISTORICAL BARLEY ESTIMATES: WYOMING

Year	Pltd	Hvstd	Yield	Prod	Year	Pltd	Hvstd	Yield	Prod	Year	Pltd	Hvstd	Yield	Prod
	1,000 acres	bu/ac	1,000 bu			1,000 acres	bu/ac	1,000 bu			1,000 acres	bu/ac	1,000 bu	
1899		1	24.2	24	1933	107	69	18.0	1,242	1967	111	96	47.0	4,512
1900		1	8.5	8	1934	80	38	22.0	836	1968	118	108	47.0	5,076
1901		2	24.5	49	1935	81	66	23.5	1,551	1969	132	116	49.5	5,742
1902		2	24.0	48	1936	90	38	20.5	779	1970	140	126	50.0	6,300
1903		2	23.5	47	1937	80	68	27.0	1,836	1971	140	125	54.0	6,750
1904		3	22.0	66	1938	90	74	27.5	2,035	1972	139	125	55.0	6,875
1905		4	28.0	112	1939	91	73	28.1	2,051	1973	140	123	58.0	6,150
1906		5	20.5	102	1940	100	87	27.0	2,349	1974	140	125	52.0	6,500
1907		6	23.0	138	1941	104	97	32.0	3,104	1975	140	127	59.0	7,493
1908		7	21.0	147	1942	128	112	27.0	3,024	1976	146	135	62.0	8,370
1909		9	22.1	199	1943	145	129	30.0	3,870	1977	150	135	55.0	7,425
1910		10	18.0	180	1944	146	131	31.0	4,061	1978	160	150	63.0	9,450
1911		12	22.0	264	1945	143	124	30.0	3,720	1979	154	145	60.0	8,700
1912		12	26.0	312	1946	154	144	30.0	4,320	1980	145	133	65.0	8,645
1913		14	24.5	343	1947	149	138	32.0	4,416	1981	145	134	67.0	8,978
1914		17	25.0	425	1948	177	159	27.5	4,372	1982	155	144	65.0	9,360
1915		16	30.5	488	1949	168	151	29.8	4,500	1983	160	152	66.0	10,032
1916		16	22.5	360	1950	178	151	28.0	4,228	1984	170	160	65.0	10,400
1917		16	26.5	424	1951	153	134	34.0	4,556	1985	170	160	66.0	10,560
1918		13	35.0	455	1952	138	117	30.5	3,568	1986	155	145	68.0	9,860
1919		8	14.5	116	1953	120	101	27.5	2,778	1987	140	130	70.0	9,100
1920		8	26.0	208	1954	162	120	24.5	2,940	1988	130	115	58.0	6,670
1921		10	20.5	205	1955	130	110	28.0	3,080	1989	110	100	70.0	7,000
1922		14	21.0	294	1956	120	100	27.0	2,700	1990	130	125	74.0	9,250
1923		20	21.5	430	1957	122	112	37.0	4,144	1991	140	135	78.0	10,530
1924	26	23	20.5	472	1958	120	105	37.0	3,885	1992	130	125	81.0	10,125
1925	40	37	25.0	925	1959	130	117	31.0	3,627	1993	120	110	86.0	9,460
1926	51	48	25.5	1,224	1960	114	96	32.0	3,072	1994	110	100	76.0	7,600
1927	77	73	27.0	1,917	1961	124	103	33.0	3,399	1995	100	95	89.0	8,455
1928	111	104	24.0	2,496	1962	130	112	37.0	4,144	1996	125	120	86.0	10,320
1929	152	137	20.5	2,808	1963	131	118	36.0	4,248	1997	115	105	80.0	8,400
1930	170	145	19.5	2,828	1964	122	107	37.0	3,959	1998	105	85	84.0	7,140
1931	116	71	17.5	1,242	1965	137	125	43.0	5,375	1999	90	85	86.0	7,310
1932	119	86	20.0	1,720	1966	123	98	35.0	3,430					

HISTORICAL OAT ESTIMATES: WYOMING

Year	Plt'd 1,000 acres	Hvstd bu/ac	Yield bu/ac	Prod 1,000 bu	Year	Plt'd 1,000 acres	Hvstd bu/ac	Yield bu/ac	Prod 1,000 bu	Year	Plt'd 1,000 acres	Hvstd bu/ac	Yield bu/ac	Prod 1,000 bu
1891		16	31.0	496	1928	155	147	27.0	3,969	1965	136	106	42.0	4,452
1892		17	29.0	493	1929	212	165	24.5	4,042	1966	122	67	36.0	2,412
1893		19	28.5	542	1930	213	162	22.5	3,645	1967	109	85	46.0	3,910
1894		19	30.5	580	1931	147	86	22.5	1,935	1968	99	68	48.0	3,264
1895		19	28.5	542	1932	185	127	23.0	2,921	1969	111	78	40.0	3,120
1896		23	31.0	713	1933	231	149	21.0	3,129	1970	112	79	49.0	3,871
1897		25	27.5	688	1934	141	63	25.5	1,606	1971	99	71	47.0	3,337
1898		24	29.5	708	1935	171	125	26.0	3,250	1972	78	53	50.0	2,650
1899		27	28.4	767	1936	183	77	25.0	1,925	1973	76	52	44.0	2,288
1900		34	23.0	782	1937	132	105	27.0	2,835	1974	70	47	38.0	1,786
1901		37	30.5	1,128	1938	157	124	28.0	3,472	1975	68	50	41.0	2,050
1902		40	29.5	1,180	1939	144	95	28.7	2,726	1976	74	56	46.0	2,576
1903		42	28.0	1,176	1940	138	102	28.5	2,907	1977	85	51	38.0	1,938
1904		46	30.5	1,403	1941	155	125	31.0	3,875	1978	81	56	56.0	3,136
1905		51	35.0	1,785	1942	140	126	31.0	3,906	1979	81	52	44.0	2,288
1906		57	31.0	1,767	1943	147	129	28.5	3,676	1980	80	51	45.0	2,295
1907		69	32.0	2,208	1944	182	150	31.4	4,710	1981	80	51	45.0	2,295
1908		90	32.5	2,925	1945	193	164	30.0	4,920	1982	85	55	55.0	3,025
1909		104	32.5	3,380	1946	174	153	30.5	4,666	1983	96	69	49.0	3,381
1910		115	27.0	3,105	1947	169	150	33.0	4,950	1984	110	70	46.0	3,220
1911		125	29.0	3,688	1948	172	143	30.0	4,290	1985	96	45	45.0	2,025
1912		120	35.0	4,200	1949	177	134	30.5	4,087	1986	92	54	50.0	2,700
1913		132	33.0	4,356	1950	186	152	32.0	4,864	1987	75	45	49.0	2,205
1914		145	30.0	4,350	1951	186	149	31.5	4,694	1988	70	35	35.0	1,225
1915		133	35.0	4,655	1952	184	145	31.0	4,495	1989	67	30	47.0	1,410
1916		126	25.0	3,150	1953	184	129	28.0	3,612	1990	60	35	44.0	1,540
1917		107	32.5	3,478	1954	162	95	26.0	2,470	1991	55	32	53.0	1,696
1918		108	34.5	3,726	1955	146	113	29.0	3,277	1992	55	30	55.0	1,650
1919		75	17.5	1,312	1956	134	93	31.0	2,883	1993	55	25	62.0	1,550
1920		82	30.0	2,460	1957	141	112	36.0	4,032	1994	55	24	50.0	1,200
1921		106	23.5	2,491	1958	138	109	38.0	4,142	1995	68	33	64.0	2,112
1922		95	25.0	2,375	1959	149	102	33.0	3,366	1996	50	32	53.0	1,696
1923		109	27.0	2,945	1960	145	92	31.0	2,852	1997	70	35	54.0	1,890
1924	138	126	23.5	2,961	1961	142	90	34.0	3,060	1998	60	22	61.0	1,342
1925	149	142	29.0	4,118	1962	135	94	40.0	3,760	1999	60	27	57.0	1,539
1926	145	138	27.5	3,798	1963	128	94	37.0	3,478					
1927	138	141	26.0	3,238	1964	106	85	35.0	2,975					

12
11

HISTORICAL DRY BEAN ESTIMATES: WYOMING

Year	Pld	Hvstd	Yield	Prod	Year	Pld	Hvstd	Yield	Prod	Year	Pld	Hvstd	Yield	Prod
	1,000 acres	lbs.	1,000 cwt.			1,000 acres	lbs.	1,000 cwt.			1,000 acres	lbs.	1,000 cwt.	
1919	1	1	300	3	1946	93	90	1,349	1,214	1973	20	19	1,840	350
1920	1	1	800	8	1947	112	107	1,241	1,328	1974	24	23	1,900	437
1921	1	1	700	7	1948	98	95	1,260	1,197	1975	26	25	1,700	425
1922	2	2	650	13	1949	83	81	1,368	1,108	1976	26	25	1,800	450
1923	5	5	500	25	1950	67	65	1,211	787	1977	24	23	1,650	380
1924	8	8	575	46	1951	56	52	1,204	626	1978	30	27	1,580	427
1925	11	10	740	74	1952	49	48	1,383	664	1979	34	32	1,900	608
1926	16	15	633	95	1953	56	55	1,453	799	1980	46	45	1,980	891
1927	19	18	828	149	1954	60	56	1,448	811	1981	51	50	2,100	1,050
1928	24	23	865	199	1955	59	53	1,110	589	1982	36	35	1,800	650
1929	30	29	910	264	1956	54	52	1,500	780	1983	19	18	1,800	324
1930	38	36	1,092	393	1957	58	56	1,550	868	1984	38	37	2,050	759
1931	42	40	918	367	1958	79	77	1,500	1,155	1985	29	27	1,780	481
1932	22	20	865	173	1959	76	74	1,500	1,110	1986	33	32	1,890	605
1933	36	33	994	328	1960	69	64	1,450	928	1987	32	31	1,920	595
1934	37	32	884	283	1961	57	55	1,690	930	1988	36	35	1,930	676
1935	49	46	965	444	1962	57	52	1,200	624	1989	46	45	1,890	851
1936	46	43	1,133	487	1963	54	53	1,680	890	1990	50	49	1,970	965
1937	67	62	1,169	725	1964	50	48	1,415	679	1991	42	41	1,950	800
1938	55	51	1,143	583	1965	50	46	1,480	681	1992	34	32	1,850	592
1939	53	49	1,090	534	1966	46	44	1,650	726	1993	38	26	1,300	339
1940	61	58	1,103	640	1967	38	38	1,650	627	1994	42	39	1,910	743
1941	62	60	1,273	764	1968	41	40	1,580	632	1995	31	28	1,800	504
1942	80	77	1,197	922	1969	31	30	1,585	476	1996	32	31	2,250	699
1943	122	112	1,092	1,235	1970	32	31	1,640	508	1997	32	31	2,260	700
1944	90	86	1,128	970	1971	27	26	1,800	468	1998	39	37	2,180	808
1945	90	86	1,100	946	1972	27	26	1,900	494	1999	40	39	2,020	788

HISTORICAL SUGARBEET ESTIMATES: WYOMING

Year	Pltd 1,000 acres	Hvstd	Yield tons/ acre	Prod 1,000 tons	Year	Pltd 1,000 acres	Hvstd	Yield tons/ acre	Prod 1,000 tons	Year	Pltd 1,000 acres	Hvstd	Yield tons/ acre	Prod 1,000 tons
1924	24.0	23.0	10.4	239	1950	38.0	36.0	12.6	454	1976	57.1	56.4	20.7	1,167
1925	30.0	29.0	12.6	364	1951	32.4	31.2	14.0	438	1977	49.5	48.4	19.6	949
1926	40.0	36.0	10.8	388	1952	34.9	34.0	13.8	468	1978	49.5	48.8	18.9	922
1927	39.0	37.0	11.6	431	1953	35.6	33.9	14.9	504	1979	48.9	48.2	18.8	906
1928	46.0	44.0	10.5	462	1954	39.6	36.3	13.1	475	1980	45.6	45.3	22.6	1,024
1929	54.0	47.0	10.4	487	1955	34.5	30.3	13.9	421	1981	45.2	44.9	24.0	1,078
1930	47.0	46.0	14.0	646	1956	34.9	33.7	14.0	472	1982	39.8	38.4	21.1	810
1931	52.0	49.0	11.3	552	1957	37.8	36.9	15.1	559	1983	32.6	32.1	19.2	616
1932	42.0	40.0	12.6	506	1958	38.6	37.6	15.9	596	1984	32.9	32.7	20.0	654
1933	55.0	52.0	11.4	593	1959	40.4	38.0	16.2	616	1985	50.2	49.4	20.9	1,032
1934	52.0	42.0	10.3	434	1960	42.5	41.5	15.3	635	1986	51.0	50.5	19.8	1,000
1935	42.0	40.0	13.1	525	1961	53.7	51.6	13.7	706	1987	54.1	53.4	21.1	1,127
1936	53.0	44.0	11.0	486	1962	51.5	48.7	12.6	612	1988	56.5	56.0	20.3	1,137
1937	49.0	47.0	13.0	612	1963	58.7	57.6	17.4	1,000	1989	61.8	59.3	19.2	1,139
1938	56.0	53.0	12.9	684	1964	66.1	64.0	13.5	864	1990	65.0	63.8	20.5	1,308
1939	55.0	49.0	11.0	539	1965	55.0	53.3	12.4	662	1991	69.0	66.4	20.6	1,368
1940	49.0	47.0	14.2	667	1966	52.0	47.3	16.5	779	1992	71.0	69.1	20.8	1,437
1941	40.0	39.0	13.6	530	1967	53.5	51.2	16.6	849	1993	66.0	64.4	19.7	1,269
1942	49.0	43.0	10.5	451	1968	64.5	62.1	16.2	1,003	1994	63.0	61.3	18.0	1,103
1943	26.0	25.0	10.8	270	1969	68.8	67.4	18.6	1,254	1995	63.0	61.5	20.3	1,249
1944	31.0	28.0	11.0	307	1970	61.2	59.0	16.2	955	1996	58.0	56.8	18.9	1,074
1945	37.0	35.0	9.8	343	1971	64.2	61.7	20.0	1,234	1997	63.0	60.9	20.4	1,240
1946	40.0	36.0	11.7	420	1972	59.0	57.2	20.0	1,146	1998	56.0	53.4	20.3	1,084
1947	39.0	36.0	12.7	457	1973	55.8	54.1	18.2	985	1999	58.0	57.1	21.1	1,205
1948	34.0	27.0	11.5	310	1974	54.9	53.5	18.4	983					
1949	30.0	28.0	14.5	406	1975	58.3	57.7	18.4	1,060					



HISTORICAL CORN ESTIMATES: WYOMING

Year	Corn All Pld	Hvst'd for Grain	Yield	Prod	Hvst'd for Silage	Yield	Prod	Year	Corn All Pld	Hvst'd for Grain	Yield	Prod	Hvst'd for Silage	Yield	Prod
	1,000 acres	bu./acre	1,000 bu.	1,000 acres	tons/acre	1,000 tons			1,000 acres	bu./acre	1,000 bu.	1,000 acres	tons/acre	1,000 tons	
1920		50	18.5	925	2	6.0	12	1960	61	20	51.0	1,020	32	10.5	336
1921		68	15.0	1,020	2	5.8	12	1961	59	20	60.0	1,200	31	13.0	403
1922		56	19.5	1,092	3	7.3	22	1962	58	8	40.0	320	39	10.0	390
1923		88	18.0	1,584	5	6.3	32	1963	55	17	55.0	935	28	12.5	350
1924	237	86	10.5	903	3	3.4	10	1964	52	14	57.0	798	29	11.0	319
1925	218	99	18.5	1,832	5	6.7	34	1965	51	14	50.0	700	27	11.0	297
1926	201	92	15.0	1,380	1	7.1	7	1966	57	14	65.0	910	37	11.5	426
1927	183	93	18.5	1,720	6	6.5	39	1967	56	20	70.0	1,400	32	14.5	464
1928	183	69	16.0	1,104	2	5.1	10	1968	61	22	75.0	1,650	29	12.5	363
1929	172	76	14.0	1,064	2	7.0	14	1969	66	22	72.0	1,595	37	13.5	500
1930	198	80	18.5	1,480	2	8.0	16	1970	65	30	65.0	1,950	29	14.0	406
1931	202	72	10.5	756	2	4.0	8	1971	74	29	78.0	2,262	39	13.5	527
1932	268	79	10.5	830	3	4.0	12	1972	78	27	85.0	2,295	46	15.0	690
1933	257	90	12.0	1,080	4	5.0	20	1973	86	30	89.0	2,670	49	15.0	735
1934	247	39	7.2	281	10	2.8	28	1974	89	29	71.0	2,059	53	14.0	742
1935	247	140	11.5	1,610	5	5.4	27	1975	81	20	80.0	1,600	54	14.5	783
1936	226	66	10.5	693	9	3.0	27	1976	81	22	87.0	1,914	54	15.5	837
1937	249	125	12.0	1,500	7	2.0	14	1977	89	30	85.0	2,550	55	13.5	743
1938	192	88	13.5	1,188	7	4.5	32	1978	87	34	81.0	2,754	45	15.5	698
1939	161	58	12.7	737	7	4.3	30	1979	87	29	87.0	2,523	54	16.5	891
1940	154	55	12.0	660	7	4.0	28	1980	87	37	97.0	3,589	45	16.0	720
1941	160	68	17.0	1,156	8	6.0	48	1981	88	46	110.0	5,060	40	17.0	680
1942	130	48	17.5	840	7	5.0	35	1982	92	49	105.0	5,145	40	18.0	720
1943	120	44	15.0	660	6	4.5	27	1983	110	68	104.0	7,072	39	17.0	663
1944	86	32	15.2	486	5	5.0	25	1984	112	60	100.0	6,000	48	17.0	816
1945	77	29	16.5	478	3	5.5	16	1985	114	53	98.0	5,194	56	16.5	924
1946	65	24	18.0	432	3	6.0	18	1986	90	51	114.0	5,814	36	18.5	666
1947	57	21	17.5	368	5	6.5	32	1987	80	41	111.0	4,551	35	19.0	665
1948	50	12	20.0	240	7	7.0	49	1988	85	53	122.0	6,466	30	18.0	540
1949	54	12	22.1	265	8	7.7	62	1989	90	41	95.0	3,895	47	16.0	752
1950	55	16	19.0	304	12	6.5	78	1990	90	50	120.0	6,000	39	19.0	741
1951	54	10	21.0	210	10	7.5	75	1991	80	49	119.0	5,831	30	19.0	570
1952	56	11	22.0	242	22	8.0	176	1992	90	53	98.0	5,194	33	16.0	528
1953	60	7	23.0	161	29	8.0	232	1993	95	44	80.0	3,520	46	16.0	736
1954	64	7	33.0	231	28	7.3	204	1994	80	48	122.0	5,856	30	18.0	540
1955	76	18	30.0	540	34	9.0	306	1995	80	48	104.0	4,992	29	17.0	493
1956	67	18	39.0	702	26	7.0	182	1996	85	50	123.0	6,150	33	18.0	594
1957	66	21	44.0	924	28	9.0	252	1997	85	52	135.0	7,020	32	21.0	672
1958	62	15	51.0	765	30	9.5	285	1998	95	60	127.0	7,620	34	19.0	646
1959	63	22	56.5	1,243	25	9.7	242	1999	85	52	118.0	6,136	31	20.0	620

HISTORICAL ALFALFA HAY ESTIMATES: WYOMING

Year	Hvstd	Yield	Prod	Year	Hvstd	Yield	Prod	Year	Hvstd	Yield	Prod
	1,000	tons/	1,000		1,000	tons/	1,000		1,000	tons/	1,000
	acres	acre	tons		acres	acre	tons		acres	acre	tons
1919	330	1.60	528	1946	348	1.55	539	1973	483	2.25	1,087
1920	418	1.75	732	1947	306	1.65	505	1974	500	2.15	1,075
1921	421	1.55	653	1948	288	1.55	446	1975	530	2.35	1,246
1922	417	1.50	626	1949	285	1.65	470	1976	515	2.30	1,185
1923	421	1.50	632	1950	308	1.50	462	1977	525	2.00	1,050
1924	400	1.40	560	1951	333	1.70	566	1978	530	2.35	1,246
1925	396	1.55	614	1952	376	1.80	677	1979	545	2.40	1,308
1926	388	1.60	621	1953	417	1.75	730	1980	505	2.15	1,086
1927	376	1.60	602	1954	409	1.65	675	1981	550	2.45	1,348
1928	384	1.55	595	1955	458	1.75	802	1982	565	2.50	1,413
1929	399	1.55	618	1956	463	1.75	810	1983	500	2.50	1,250
1930	390	1.40	546	1957	482	1.90	916	1984	510	2.45	1,250
1931	360	1.40	504	1958	487	1.90	925	1985	440	2.20	968
1932	380	1.45	551	1959	468	1.70	796	1986	600	2.50	1,500
1933	400	1.50	600	1960	463	1.55	718	1987	570	2.40	1,368
1934	301	1.40	412	1961	468	1.85	866	1988	520	2.30	1,196
1935	346	1.70	588	1962	468	2.05	959	1989	520	2.30	1,196
1936	318	1.60	509	1963	463	2.10	972	1990	570	2.40	1,368
1937	324	1.70	551	1964	486	1.95	948	1991	640	2.50	1,600
1938	305	1.65	503	1965	437	2.10	918	1992	520	2.30	1,196
1939	300	1.55	465	1966	424	1.90	806	1993	640	2.50	1,600
1940	330	1.70	561	1967	437	2.35	1,027	1994	610	2.30	1,403
1941	360	1.75	630	1968	445	2.05	912	1995	640	2.70	1,728
1942	378	1.65	624	1969	449	2.00	898	1996	620	2.40	1,488
1943	370	1.75	648	1970	453	2.20	997	1997	640	2.70	1,728
1944	370	1.70	629	1971	458	2.30	1,053	1998	600	2.60	1,560
1945	363	1.75	635	1972	474	2.25	1,067	1999	660	2.70	1,782

HISTORICAL OTHER HAY ESTIMATES: WYOMING

Year	Hvstd	Yield	Prod	Year	Hvstd	Yield	Prod	Year	Hvstd	Yield	Prod
	1,000	tons/	1,000		1,000	tons/	1,000		1,000	tons/	1,000
	acres	acre	tons		acres	acre	tons		acres	acre	tons
1919	460	0.8	367	1946	743	0.9	675	1973	687	1.20	824
1920	530	1.1	587	1947	774	1.0	760	1974	610	1.10	671
1921	577	1.0	569	1948	729	0.7	514	1975	665	1.05	698
1922	599	1.0	627	1949	822	0.9	740	1976	700	1.10	770
1923	605	1.2	719	1950	798	0.8	652	1977	620	0.95	589
1924	636	1.0	617	1951	782	0.9	705	1978	670	1.20	804
1925	639	1.1	684	1952	780	0.9	702	1979	655	1.25	819
1926	625	1.2	721	1953	742	0.9	703	1980	665	1.10	732
1927	625	1.1	702	1954	575	0.8	442	1981	672	1.20	806
1928	630	1.1	691	1955	640	0.9	565	1982	620	1.35	837
1929	642	1.0	614	1956	625	0.9	547	1983	680	1.40	952
1930	617	0.9	560	1957	670	1.0	692	1984	700	1.35	945
1931	588	0.7	410	1958	662	1.0	673	1985	590	1.25	738
1932	625	0.8	520	1959	625	0.9	558	1986	700	1.35	945
1933	743	0.8	584	1960	598	0.8	473	1987	630	1.35	851
1934	533	0.6	326	1961	653	0.9	561	1988	620	1.10	682
1935	696	0.9	630	1962	727	0.9	649	1989	580	1.00	580
1936	631	0.8	481	1963	687	0.9	599	1990	590	1.20	708
1937	688	0.9	623	1964	694	1.0	665	1991	680	1.50	1,028
1938	673	0.9	594	1965	727	0.9	677	1992	590	1.20	708
1939	659	0.8	523	1966	647	0.9	609	1993	630	1.60	1,008
1940	701	0.9	617	1967	727	1.1	815	1994	520	1.20	624
1941	762	1.0	773	1968	669	1.0	648	1995	660	1.50	990
1942	749	0.9	703	1969	641	1.0	662	1996	600	1.20	720
1943	740	0.9	634	1970	700	1.1	756	1997	620	1.40	868
1944	786	0.9	683	1971	707	1.05	742	1998	590	1.50	885
1945	740	0.9	639	1972	679	1.10	747	1999	630	1.60	1,008

HISTORICAL CATTLE ESTIMATES: WYOMING, JANUARY 1 INVENTORY, ANNUAL CALF CROP

Year	All Cattle and Calves	All Cows	Calf Crop	Cattle on Feed	Year	All Cattle and Calves	All Cows	Calf Crop	Cattle on Feed	Year	All Cattle and Calves	All Cows	Calf Crop	Cattle on Feed
1,000 Head					1,000 Head					1,000 Head				
1891	700				1928	771	352	245		1965	1,352	688	626	40
1892	650				1929	778	363	255		1966	1,379	719	640	41
1893	650				1930	790	364	259	18	1967	1,365	694	632	35
1894	675				1931	837	399	297	15	1968	1,447	734	661	46
1895	628				1932	885	425	323	16	1969	1,461	743	684	36
1896	601				1933	956	466	357	16	1970	1,476	751	681	31
1897	617				1934	1,050	514	372	13	1971	1,520	747	710	35
1898	585				1935	858	419	289	6	1972	1,550	777	729	37
1899	607				1936	849	416	266	12	1973	1,565	798	760	31
1900	611				1937	781	392	294	15	1974	1,600	816	785	39
1901	675				1938	820	390	296	16	1975	1,690	819	760	38
1902	720				1939	828	407	317	13	1976	1,580	760	705	39
1903	766				1940	811	416	329	15	1977	1,600	755	670	55
1904	750				1941	827	429	352	16	1978	1,357	625	642	60
1905	750				1942	885	457	384	18	1979	1,380	662	580	60
1906	750				1943	965	485	383	16	1980	1,340	632	640	52
1907	750				1944	1,033	512	420	14	1981	1,350	647	650	40
1908	750				1945	1,043	520	406	16	1982	1,390	685	675	52
1909	765				1946	1,043	517	414	21	1983	1,475	704	640	127
1910	746				1947	1,053	525	425	20	1984	1,395	680	635	65
1911	675				1948	1,053	509	407	20	1985	1,365	630	700	110
1912	609				1949	1,011	509	366	18	1986	1,360	700	670	102
1913	669				1950	991	484	421	15	1987	1,340	680	650	70
1914	772				1951	1,050	523	450	17	1988	1,360	675	640	100
1915	887				1952	1,144	582	495	24	1989	1,300	660	620	109
1916	1,012				1953	1,178	577	490	33	1990	1,220	660	620	75
1917	1,052				1954	1,178	580	516	35	1991	1,190	660	670	50
1918	1,241				1955	1,096	568	483	30	1992	1,290	700	710	105
1919	1,301				1956	1,118	553	481	28	1993	1,250	730	770	90
1920	950				1957	1,140	558	485	32	1994	1,480	790	780	95
1921	859				1958	1,140	552	497	40	1995	1,470	780	790	100
1922	898				1959	1,163	572	515	50	1996	1,490	810	830	95
1923	881				1960	1,175	585	509	55	1997	1,580	870	890	80
1924	825				1961	1,104	582	512	56	1998	1,600	900	830	85
1925	795	352	245		1962	1,115	590	525	47	1999	1,500	820	820	100
1926	787	349	291		1963	1,193	622	560	46	2000	1,400	750	750	80
1927	779	351	291		1964	1,300	676	595	40					

**HISTORICAL SHEEP AND WOOL ESTIMATES: WYOMING, JANUARY 1 INVENTORY,
ANNUAL LAMB AND WOOL CROPS**

Year	All Sheep and Lambs	Breeding Sheep and Lambs	Wool Prod	Year	All Sheep and Lambs	Breeding Sheep and Lambs	Lamb Crop	Wool Prod	Year	All Sheep and Lambs	Breeding Sheep and Lambs	Lamb Crop	Wool Prod
	1,000 Head	1,000 Head	lbs		1,000 Head	1,000 Head	1,000 Head	lbs		1,000 Head	1,000 Head	1,000 Head	lbs
1891		1,573		1928	3,306	3,216		27,900	1965	2,092	1,989	1,295	18,945
1892		1,604		1929	3,471	3,361	1,613	26,502	1966	2,209	1,909	1,338	19,526
1893		1,684		1930	3,540	3,420	2,189	29,702	1967	1,951	1,822	1,182	19,020
1894		1,684		1931	3,894	3,722	2,419	36,000	1968	1,873	1,749	1,203	17,572
1895		1,718		1932	3,972	3,792	2,084	31,513	1969	1,904	1,766	1,163	17,023
1896		1,890		1933	3,893	3,703	1,651	29,808	1970	1,883	1,713	1,115	16,573
1897		2,174		1934	3,873	3,703	2,234	33,212	1971	1,829	1,679	1,121	16,512
1898		2,391		1935	3,599	3,444	1,728	30,513	1972	1,735	1,561	1,077	16,062
1899		2,917		1936	3,540	3,360	1,923	29,051	1973	1,678	1,480	912	14,497
1900		3,675		1937	3,500	3,250	1,985	29,634	1974	1,532	1,347	910	13,691
1901		3,900		1938	3,543	3,305	2,312	30,458	1975	1,386	1,226	789	12,638
1902		4,243		1939	3,723	3,478	2,203	30,729	1976	1,268	1,103	763	11,283
1903		3,734		1940	3,778	3,478	2,271	31,718	1977	1,206	1,071	718	10,880
1904		3,547		1941	3,838	3,548	2,373	33,379	1978	1,115	1,010	615	10,317
1905		3,547		1942	3,934	3,654	2,270	33,320	1979	1,080	960	580	9,516
1906		3,795		1943	3,744	3,544	2,218	32,997	1980	1,050	960	640	10,205
1907		4,364		1944	3,448	3,198	1,895	27,000	1981	1,110	990	685	10,150
1908		5,019		1945	3,040	2,800	1,852	24,700	1982	1,130	1,000	660	10,118
1909		6,023	46,978	1946	2,790	2,548	1,796	23,950	1983	1,060	950	680	10,484
1910		5,480	41,723	1947	2,519	2,344	1,672	21,810	1984	1,090	960	540	8,806
1911		5,096	37,605	1948	2,415	2,250	1,482	20,083	1985	860	740	610	8,866
1912		4,077	28,736	1949	2,070	1,980	1,115	18,285	1986	819	720	520	8,240
1913		3,792	30,160	1950	1,924	1,841	1,168	17,462	1987	775	690	515	7,735
1914		3,527	28,394	1951	2,022	1,951	1,344	20,568	1988	875	760	570	8,195
1915		3,527	28,736	1952	2,222	2,107	1,298	19,810	1989	837	720	550	7,930
1916		3,633	29,369	1953	2,195	2,065	1,313	20,209	1990	805	705	550	8,135
1917		3,270	25,016	1954	2,125	2,003	1,402	21,142	1991	830	720	570	8,475
1918		3,335	28,144	1955	2,036	1,903	1,298	19,320	1992	870	720	580	8,068
1919		3,602	29,068	1956	2,071	1,941	1,395	20,120	1993	880	690	530	7,749
1920	3,000	2,960	20,655	1957	2,095	1,980	1,314	19,354	1994 1/	813	620	510	7,343
1921	2,875	2,840	20,750	1958	2,194	2,059	1,453	20,715	1995	790	538	460	6,411
1922	2,676	2,641	19,024	1959	2,276	2,141	1,403	21,386	1996	680	560	460	5,811
1923	2,520	2,460	18,293	1960	2,360	2,248	1,560	22,839	1997	720	550	460	5,690
1924	2,520	2,432	19,090	1961	2,254	2,136	1,512	21,933	1998	710	530	440	5,540
1925	2,700	2,613	22,500	1962	2,198	2,093	1,448	21,056	1999	630	480	390	4,930
1926	2,835	2,722	22,338	1963	2,198	2,093	1,470	21,535	2000	570	460		
1927	3,119	3,064	26,460	1964	2,178	2,070	1,355	19,513					

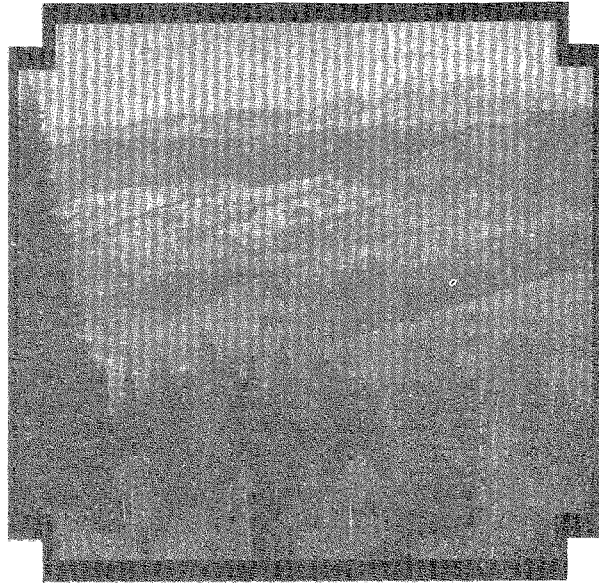
1/Includes new crop lambs (born Oct 1 - Jan 1) beginning in 1994. New crop lambs not allocated to breeding and market in 1994.

**HISTORICAL HOG AND PIG ESTIMATES: WYOMING,
INVENTORY AND PIG CROP**

Year 1/	All Hogs and Pigs 1,000 Head	Year 1/	All Hogs and Pigs 1,000 Head	Pig Crop	Year 1/	All Hogs and Pigs 1,000 Head	Breeding	Market	Pig Crop
1891	Jan 1 10	1928	170		1965	Dec 1 27	4	23	35.0
1892	11	1929	150		1966	25	4	21	36.0
1893	16	1930	130	153.0	1967	27	5	22	40.0
1894	16	1931	137	153.0	1968	33	5	28	48.0
1895	16	1932	123	106.0	1969	41	6	35	53.0
1896	16	1933	98	87.0	1970	51	8	43	65.0
1897	18	1934	87	61.0	1971	61	7	54	71.0
1898	22	1935	49	64.0	1972	55	7	48	56.0
1899	22	1936	47	100.0	1973	44	6	38	49.0
1900	20	1937	50	75.0	1974	39	6	33	48.0
1901	22	1938	60	94.0	1975	30	5	25	39.0
1902	24	1939	70	133.0	1976	32	6	26	46.0
1903	25	1940	87	116.0	1977	32	5	27	41.0
1904	28	1941	76	107.0	1978	30	5	25	37.0
1905	33	1942	84	169.0	1979	32	4	28	39.0
1906	33	1943	130	210.0	1980	30	5	25	41.0
1907	36	1944	164	114.0	1981	33	5	28	46.0
1908	37	1945	78	102.0	1982	29	4	25	41.0
1909	38	1946	74	113.0	1983	27	4	23	38.0
1910	40	1947	70	120.0	1984	25	4	21	34.0
1911	60	1948	76	124.0	1985	34	5	29	57.0
1912	40	1949	83	123.0	1986	35	6	29	68.0
1913	45	1950	75	100.0	1987	27	4	23	44.0
1914	48	1951	72	122.0	1988	21	4	17	46.2
1915	55	1952	76	83.0	1989	16	2	14	34.0
1916	60	1953	53	52.0	1990	20	2	18	32.0
1917	60	1954	34	53.0	1991	24	3	21	42.4
1918	68	1955	34	49.0	1992	35	5	30	66.5
1919	80	1956	33	52.0	1993	36	5	31	70.0
1920	72	1957	33	44.0	1994	51	6	45	88.0
1921	68	1958	31	58.0	1995	73	9	64	123.0
1922	83	1959	38	61.0	1996	82	13	69	150.0
1923	105	1960	35	41.0	1997	95	19	76	243.0
1924	129	1961	29	45.0	1998	140	20	120	306.0
1925	102	1962	28	35.0	1999	105	18	87	249.0
1926	94	1963	21	45.0					
1927	125	1964	31	41.0					
1928	170	1965	28	35.0					

1/January 1 through 1965, then December 1 estimates begin.

GENERAL



WYOMING AGRICULTURE 1998-99

The value of the ag sector output in Wyoming annually approaches or exceeds one billion dollars with cash income historically around \$800 million. In 1999, 9,200 farms and ranches were operating in Wyoming with a total land area of 34.6 million acres. Wyoming ranks eighth nationally in total land in farms and ranches and first in average size of farms and ranches. According to the Wyoming Division of Economic Analysis, the agricultural sector — farm and ag services — provides over 17,000 jobs. The cattle industry is by far the largest component of Wyoming agriculture accounting for around 70 percent of all cash receipts. Cattle also led the way in 1999 in terms of value of production at \$452.1 million. All livestock production was valued at \$506.8 million, up 9 percent from 1998. Sheep and hogs were far behind cattle with value of production at \$22.5 million and \$17.7 million.

Hay is by far the leading crop in Wyoming in terms of value of production — \$180.4 million in 1999, but most is marketed through livestock. **Sugarbeets** had the next highest crop value in 1999, at \$46.9 million, followed by **wheat** at \$14.1 million, and **barley** at \$11.7 million. In terms of cash receipts, hay and sugarbeets are usually close contenders for the leading crop followed by wheat and barley.

Cattle and calves inventory on January 1, 2000 totaled 1.58 million head, valued at \$1.22 billion. Cattle inventory rose 1 percent in 1999. The January 1, 2000 inventory of **sheep and lambs** was 570,000 head, valued at \$51.3 million. Breeding sheep inventory in Wyoming decreased 4 percent in 1999 due to a 5 percent drop in ewes. **Hog and pig** inventory fell 25 percent in 1999 totaling 105,000 on December 1, 1999. The drop was due mostly to a 27 percent drop in market hogs in the State on December 1. Hog and pig inventory value on December 1, 1999 was \$9.03 million.

ANNUAL CROP SUMMARY 1998 AND 1999

Crop	Planted		Harvested		Yield per Harvested Acre		Production		
	1998	1999	1998	1999	1998	1999	1998	1999	99/98 %
	1,000 Acres		1,000 Acres				1,000		
WYOMING									
Corn-Grain (bu) 1/	95	85	60	52	127.0	118.0	7,620	6,136	81%
Corn-Silage (tons)	—	—	34	31	19.0	20.0	646	620	96%
Winter Wheat (bu)	220	200	200	185	32.0	33.0	6,400	6,105	95%
Spring Wheat (bu)	14	10	10	8	39.0	36.0	390	288	74%
All Wheat (bu)	234	210	210	193	32.3	33.1	6,790	6,393	94%
Oats (bu)	60	60	22	27	61.0	57.0	1,342	1,539	115%
Barley (bu)	105	50	85	85	84.0	86.0	7,140	7,310	102%
Sugarbeets (tons)	56.0	58.0	53.4	57.1	20.3	21.1	1,084	1,205	111%
Dry Beans (cwt)	39.0	40.0	37.0	39.0	21.8	20.2	808	788	98%
Pinto	28.0	28.0	27.0	27.5	21.4	20.3	578	558	97%
Great Northern	6.0	8.0	5.5	7.7	23.1	20.3	127	156	123%
Black	3.0	—	2.8	—	23.9	—	67	—	—
Navy	—	2.0	—	1.9	—	19.5	—	37	—
All Other	2.0	2.0	1.7	1.9	21.2	19.5	36	37	103%
Fall Potatoes (cwt)	0.4	0.5	0.4	0.5	300	296	120	148	123%
Alfalfa Hay (tons)	—	—	600	660	2.60	2.70	1,560	1,782	114%
Other Hay (tons)	—	—	590	630	1.50	1.60	885	1,008	114%
All Hay (tons)	—	—	1,190	1,290	2.05	2.16	2,445	2,792	114%

1/Corn planted for all purposes, harvested for grain.

1999 LIVESTOCK SUMMARY

Species	Date	Number of Head
All Cattle and Calves	January 1, 1999	1,560,000
	January 1, 2000	1,580,000
All Sheep and Lambs	January 1, 1999	630,000
	January 1, 2000	570,000
All Hogs and Pigs	December 1, 1998	140,000
	December 1, 1999	105,000

WYOMING'S RANK IN THE NATION'S AGRICULTURE, 1999

Crop or Livestock Item	Unit	Production or Number		Wyoming's Rank
		U.S.	Wyoming	
Thousand				
Average Size of Farms & Ranches 1/	Acres	432	3,761	1
Wool	Lbs.	46,549	4,930	2
Breeding Sheep 2/	Head	5,163.0	460	2
All Sheep & Lambs 2/	Head	7,026.0	570	3
Market Sheep 2/	Head	1,863.0	110	4
Pinto Beans	Cwt.	10,839	558	5
Barley	Bu.	281,853	7,310	8
All Dry Beans	Cwt.	33,230	788	8
Land in Farms & Ranches	Acres	947,340	34,600	8
Sugarbeets	Tons	33,319	1,205	9
Spring Wheat	Bu.	503,132	288	11
Beef Cows 2/	Head	33,546.0	824	15
Alfalfa Hay	Tons	83,924	1,782	18
Cattle on Feed 2/	Head	13,983	90	20
Oats	Bu.	146,218	1,539	22
All Cattle & Calves 2/	Head	98,048.0	1,580	22
All Hay	Tons	159,077	2,790	23
Other Hay	Tons	75,153	1,008	24
Corn for Silage	Tons	96,169	620	30
All Hogs and Pigs 3/	Head	59,407	105	30
Winter Wheat	Bu.	1,699,989	6,105	31
Corn for Grain	Bu.	9,437,337	6,136	34

1/Actual Number

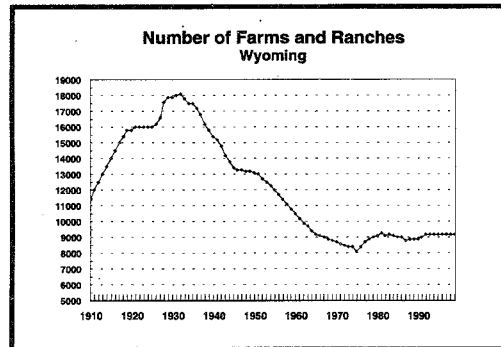
2/January 1, 2000

3/December 1, 1999

RANK OF WYOMING COUNTIES: LIVESTOCK INVENTORY AND CROP PRODUCTION

Crop	January 1, 2000			1999 Production					
	All Cattle	Breeding Sheep	Winter Wheat	Barley	Oats	Dry Beans	Sugarbeets	Corn Grain	All Hay
Albany	10	17 *	17 *						7
Big Horn	16	10	15 *	2	1	3	2	5	11
Campbell	6	4	4	13	4				14
Carbon	5	7	8		19				3
Converse	7	1	9	15	18				15
Crook	11	8	5	9	8				2
Fremont	2	11 *	15 *	5	3	5	5	7	1
Goshen	1	19	2	14	11	1	4	1	4
Hot Springs	21	21		12	12	8			23
Johnson	12	3	13	17	16				18
Laramie	8	13 *	1	10	9	4	7	2	10
Lincoln	18	6	17 *	4	5				6
Natrona	15	5	11	16	15				16
Niobrara	9	13 *	7	18	6				17
Park	13	17 *	12	1	2	2	1	6	9
Platte	3	22 *	3	6	13	7	6	3	8
Sheridan	4	16	6	7	10				5
Sublette	14	9			20 *				13
Sweetwater	22	15		11	17				19
Teton	23	22 *		8	20 *				22
Uinta	19	2	14	19				8	12
Washakie	20	11 *		3	7	6	3	4	20
Weston	17	20	10	20	14				21

*Tied with another County.



**NUMBER OF FARMS AND RANCHES AND LAND IN FARMS: WYOMING 1980-99;
ECONOMIC SALES CLASS: WYOMING AND U.S. 1998-99**

Year	Number of Farms 1/			Land in Farms			Average Size of All Farms
	Sales Class 2/			Sales Class 2/			
	\$1,000 - \$9,999	\$10,000 & Over	Total	\$1,000 - \$9,999	\$10,000 & Over	Total	
	Number			1,000 Acres			Acres
1980			9,100			35,000	3,846
1981			9,300			35,000	3,763
1982			9,100			35,000	3,846
1983			9,200			35,000	3,804
1984			9,100			34,800	3,824
1985			9,000			34,800	3,867
1986			9,000			34,800	3,867
1987			8,800			34,800	3,955
1988			8,900			34,800	3,910
1989			8,900			34,800	3,910
1990			8,900			34,700	3,899
1991			9,000			34,700	3,856
1992			9,200			34,600	3,761
1993			9,200			34,600	3,761
1994			9,200			34,600	3,761
1995			9,200			34,600	3,761
1996			9,200			34,600	3,761
1997			9,200			34,600	3,761
1998	3,400	5,800	9,200	3,100	31,500	34,600	3,761
1999	3,400	5,800	9,200	3,100	31,500	34,600	3,761
U.S.							
1998	1,180,950	1,010,410	2,191,360	133,788	819,712	953,500	435
1999	1,196,640	997,430	2,194,070	133,128	814,212	947,340	432

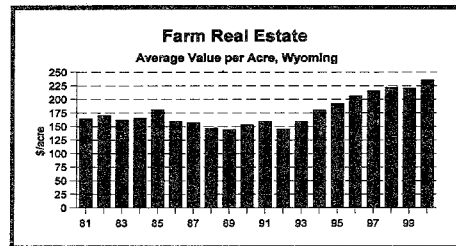
1/A farm is any establishment from which \$1,000 or more of agricultural products were sold or would normally be sold during the year. Beginning in 1997, farm numbers are for the entire year. Prior farm numbers are for a June 1 reference date.

2/Sales class estimates available for Wyoming beginning in 1998.

**VALUE OF FARMLAND AND BUILDINGS, CROPLAND, AND PASTURE,
CASH RENT FOR PASTURE: WYOMING 1991-2000**

Year	Average Value per Acre, January 1				Cash Rent per Acre
	Farmland and Buildings	Cropland		Pasture	Pasture
		Irrigated	Non-Irrigated		
		Dollars			
1991	159	1/	1/	1/	3.50
1992	145	1/	1/	1/	3.60
1993	159	1/	1/	1/	4.20
1994	180	1/	1/	1/	3.10
1995	192	1/	1/	1/	3.50
1996	206	1/	1/	1/	1/
1997	215	900	220	150	1/
1998	222	940	230	160	1/
1999	220	940	245	150	4.00
2000	235	980	260	160	4.00

1/Estimates not made.



**AVERAGE RATES FOR GRAZING CATTLE ON PRIVATE,
NON-IRRIGATED LAND: WYOMING AND SELECTED REGIONS 1985-99**

Year	Average Rates 1/				
	Wyoming			Eleven States Animal Unit 2/	Sixteen States Animal Unit 3/
	Animal Unit	Cow-Calf	Per Head		
Dollars Per Month					
1985	9.64	11.86	8.37	8.40	9.06
1986	8.31	10.45	7.96	8.10	8.33
1987	6.31	8.60	6.52	7.55	8.09
1988	8.93	10.60	11.20	8.49	8.98
1989	10.06	11.85	8.89	8.70	10.06
1990	9.64	11.35	9.69	9.19	10.86
1991	9.98	11.12	9.60	9.25	9.78
1992	9.93	12.21	10.47	9.41	10.46
1993	10.50	12.60	11.00	9.70	10.60
1994	10.50	12.40	11.00	10.00	11.30
1995	11.30	13.00	11.50	10.30	11.20
1996	11.00	13.00	11.10	10.40	11.40
1997	12.00	14.00	12.20	10.70	11.70
1998	11.90	13.80	12.30	11.10	12.30
1999	11.70	13.50	12.00	11.40	12.30

1/Official estimates beginning in 1993. Survey averages for prior years.

2/Eleven states includes: AZ, CA, CO, ID, MT, NV, NM, OR, UT, WA, and WY.

3/Sixteen states includes: Previous eleven plus KS, NE, ND, OK, and SD.

Note: Cow-calf is 1.2 animal units.

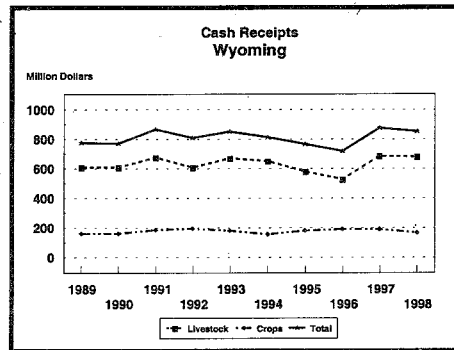
VALUE ADDED TO U.S. ECONOMY BY AGRICULTURAL SECTOR: WYOMING 1992-98 1/

	1992	1993	1994	1995	1996	1997	1998
<i>million dollars</i>							
Ag Sector Output	912.8	1,016.9	883.0	915.6	905.2	1,136.4	933.9
Animal Output	660.5	713.7	643.6	591.5	582.7	805.8	615.5
Animal Cash Receipts	608.1	669.5	652.7	581.9	527.3	685.8	680.6
Animal Home Consumption	5.8	4.2	5.6	5.0	4.6	6.4	5.7
Value of Animal Inventory Adjustment 2/	46.7	40.0	-14.7	4.6	50.7	113.7	-70.8
Crop Output	168.8	206.5	137.4	206.6	194.7	205.9	165.2
Crop Cash Receipts	198.1	180.6	160.2	181.5	189.9	190.5	169.7
Crop Home Consumption	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Value of Crop Inventory Adjustment 2/	-29.9	25.4	-23.5	24.5	4.2	14.8	-5.1
Services, Rental Value, & Other Income	83.5	96.6	102.0	117.5	127.8	124.6	153.2
Imputed Rental Value of Farm Dwellings	42.8	49.7	60.1	68.5	71.8	74.0	78.5
Machine Hire & Custom Work	8.2	8.6	9.6	9.0	10.1	12.2	10.9
Other Farm Income	32.4	38.3	32.3	40.0	45.9	38.3	63.8
<i>plus</i>							
Net Government Transactions	11.7	16.5	7.8	-0.6	-8.4	-11.4	-7.2
+ Direct Government Payments	36.7	43.2	38.2	31.2	24.5	22.4	28.7
- Vehicle Registration & Licensing	3.0	3.2	4.1	3.4	3.7	3.8	4.4
- Property Taxes	22.0	23.5	26.3	28.5	29.3	30.0	31.6
<i>minus</i>							
Intermediate Consumption Outlays	461.7	527.1	534.1	534.3	543.4	629.7	580.2
Livestock, Feed, & Seed Purchased	234.4	282.3	240.9	244.1	246.1	305.5	263.1
Manufactured Inputs	66.3	66.8	81.4	84.6	95.6	95.1	85.7
Maintenance, marketing, other expenses	161.0	178.0	211.8	205.6	201.7	229.2	231.4
<i>equals</i>							
Gross Value Added	462.8	506.3	356.7	380.7	353.4	495.3	346.6
<i>minus</i>							
Capital Consumption	91.2	93.2	97.0	99.4	101.4	102.6	103.6
<i>equals</i>							
Net Value Added	371.6	413.0	259.7	281.3	252.0	392.7	243.0
<i>minus</i>							
Factor Payments	133.1	136.0	152.6	181.9	171.2	184.8	183.2
Hired Labor	43.7	52.3	66.3	67.2	64.8	68.8	69.6
Real Estate & Non-Real Estate Interest	64.7	60.7	71.7	77.4	69.5	72.0	75.5
Net Rent Rec'd. by Nonoperator Landlords	24.7	23.0	14.6	37.3	36.9	43.9	38.2
<i>equals</i>							
Net Farm Income	238.4	277.0	107.1	99.4	80.8	207.9	59.8

1/Data from Table entitled, "Value added to the State's economy by the agricultural sector via the production of goods and services, 1990-98", Economic Research Service, USDA, Internet Web Site (www.econ.ag.gov), Farm Business Economics Briefing Room, Revised July 22, 1999.

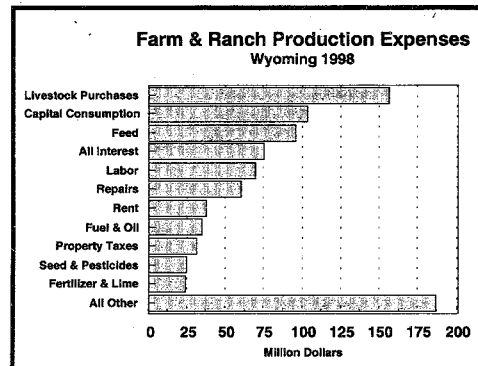
2/A positive inventory adjustment value represents current year production not sold by December 1. A negative inventory adjustment value is an offset to production from prior years included in current year sales.

Note: The value-added format is now used to present the agricultural sector income accounts for the U.S. and states, replacing the traditional net farm income format. The underlying accounting concepts remain the same under both formats and the value for net farm income is identical. Changes in commodity production is the cause of most of the volatility in the income accounts, and the presence of more disaggregated components under the value-added format makes it easier to discern what forces are driving the changes and trends in farm income. In addition, the value-added approach to the sector accounting has the advantage of being the format accepted and utilized internationally, thereby enabling comparison across countries.

**CASH RECEIPTS BY COMMODITIES: WYOMING 1991-98 1/**

	1991	1992	1993	1994	1995	1996	1997	1998
	<i>million dollars</i>							
All Commodities	863.1	806.2	850.0	813.0	763.3	717.2	876.3	850.3
Livestock and Products	675.7	608.1	669.5	652.7	581.9	527.3	685.8	680.6
Meat Animals	651.1	578.7	642.9	623.9	550.2	493.5	653.3	648.4
Cattle and Calves	623.7	542.8	602.0	589.5	499.3	443.8	583.4	598.9
Sheep and Lambs	23.0	31.0	33.4	28.0	41.2	32.3	40.5	30.2
Hogs	4.4	4.9	7.5	6.4	9.8	17.3	29.4	19.2
Dairy Products	11.9	12.4	11.9	10.9	9.2	11.4	10.0	10.7
Poultry / Eggs	0.3	0.2	0.2	0.2	0.3	0.8	0.4	0.3
Miscellaneous Livestock	12.5	16.9	14.6	17.7	22.1	21.7	22.1	21.3
Wool	5.2	6.9	4.2	6.2	7.7	5.0	5.6	4.3
Honey	1.2	1.6	1.0	1.8	1.0	2.6	1.8	1.9
Other Livestock	6.2	8.4	9.4	9.6	13.4	14.1	14.8	15.2
Crops	187.3	198.1	180.6	160.2	181.5	189.9	190.5	169.7
Wheat	15.8	19.0	18.3	18.7	27.6	32.1	24.5	20.4
Feed Crops	97.6	90.1	86.8	79.3	84.5	83.6	94.6	80.4
Hay	53.5	61.7	54.2	49.7	48.2	37.2	55.3	49.4
Barley	32.9	17.6	23.6	18.9	22.3	29.3	22.6	16.3
Corn	10.3	9.9	7.6	9.7	12.6	15.3	15.3	13.8
Oats	0.8	1.0	1.4	1.0	1.4	1.7	1.4	0.9
Oil Crops	0.4	0.2	0.2	0.2	0.2	0.2	0.2	0.3
Vegetables	19.1	25.5	20.4	16.6	18.0	18.6	15.7	16.0
Dry Beans	16.5	22.8	16.9	13.3	15.4	16.7	14.7	15.3
Potatoes	2.5	2.3	3.0	2.9	2.4	1.6	0.8	0.5
Misc. Vegetables	0.1	0.5	0.5	0.4	0.2	0.2	0.2	0.2
All Other Crops	54.4	63.3	54.8	45.4	51.1	55.4	55.5	52.5
Sugarbeets	52.4	58.5	51.6	42.1	47.1	49.9	47.7	41.9
Greenhouse and Nursery	1.6	4.3	2.8	2.9	3.0	3.1	4.1	4.2
Other Crops	0.4	0.5	0.4	0.4	1.0	2.4	3.6	6.4

1/ Data from Table entitled, "Cash Receipts by Commodity Groups and Selected Commodities", Economic Research Service, USDA, Internet Web Site (www.econ.ag.gov), Farm Business Economics Briefing Room, Revised August 6, 1999.

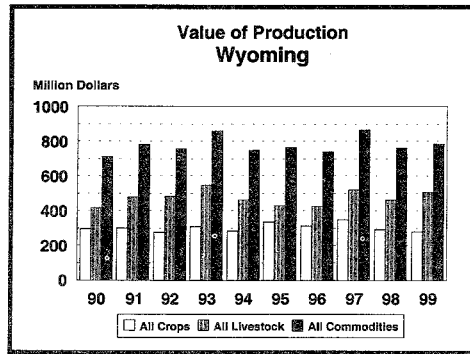


FARM AND RANCH PRODUCTION EXPENSES: WYOMING 1992-98 1/

	1992	1993	1994	1995	1996	1997	1998
	<i>million dollars</i>						
Intermediate Consumption Outlays	461.7	527.1	534.1	534.3	543.4	629.7	580.2
Farm Origin	234.4	282.3	240.9	244.1	246.1	305.5	263.1
Feed Purchased	58.3	57.4	64.8	82.3	92.3	98.5	96.2
Livestock & Poultry Purchased	166.5	215.1	164.9	151.6	142.9	195.6	156.1
Seed Purchased	9.6	9.9	11.1	10.2	10.8	11.4	10.8
Manufactured Inputs	66.3	66.8	81.4	84.6	95.6	95.1	85.7
Fertilizers & Lime	17.3	18.8	25.6	27.2	30.0	31.6	24.5
Pesticides	7.9	8.7	10.1	10.6	11.6	12.8	14.1
Petroleum Fuel & Oils	29.5	28.5	32.2	32.3	37.5	39.3	35.3
Electricity	11.6	10.8	13.5	14.5	16.6	11.3	11.8
Other Intermediate Expenses	161.0	178.0	211.8	205.6	201.7	229.2	231.4
Repair & Maintenance	51.0	48.5	55.0	53.9	59.0	56.0	60.5
Machine Hire & Customwork	13.0	13.6	13.6	16.3	11.0	12.0	14.1
Marketing, Storage, Trans.	13.4	23.1	23.9	22.8	19.3	32.4	28.2
Contract Labor	4.4	4.4	4.0	5.9	7.0	7.6	6.9
Miscellaneous Expenses	79.2	88.5	115.3	106.7	105.4	121.2	121.7
Government Transactions	25.0	26.7	30.4	31.9	33.0	33.8	35.9
Vehicle Registration & Licensing	3.0	3.2	4.1	3.4	3.7	3.8	4.4
Property Taxes	22.0	23.5	26.3	28.5	29.3	30.0	31.6
Capital Consumption	91.2	93.2	97.0	99.4	101.4	102.6	103.6
Factor Payments	133.1	136.0	152.6	181.9	171.2	184.8	183.2
Hired Labor	43.7	52.3	66.3	67.2	64.8	68.8	69.6
Real Estate & Non-Real Estate Interest	64.7	60.7	71.7	77.4	69.5	72.0	75.5
Net Rent Rec'd. by Nonoperator Landlords	24.7	23.0	14.6	37.3	36.9	43.9	38.2
Total Expenses	711.0	783.1	814.1	847.4	848.9	950.9	902.9

1/Data from Table entitled, "Value added to the State's economy by the agricultural sector via the production of goods and services, 1990-98", Economic Research Service, USDA, Internet Web Site (www.econ.ag.gov), Farm Business Economics Briefing Room, Revised July 22, 1999.

Totals may not add due to rounding.

**VALUE OF PRODUCTION BY COMMODITIES: WYOMING 1990-99**

Commodity	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
1,000 Dollars										
All Commodities	713,277	781,127	757,209	858,476	748,604	765,181	739,522	869,468	760,685	787,049 1/
Livestock and Products	419,318	481,073	483,066	548,829	465,306	429,862	427,679	518,878	463,096	506,825
Cattle and Calves 2/	370,697	436,418	428,733	496,310	413,538	371,823	359,805	442,717	400,637	452,058
Sheep and Lambs 2/	20,051	20,793	26,925	27,386	25,522	29,343	31,708	33,935	24,493	22,489
Wool	7,240	5,170	6,938	4,184	6,168	7,693	4,997	5,576	4,266	2,416
Hogs 2/	3,979	4,856	5,730	7,421	6,847	9,986	16,632	24,474	20,717	17,720
Chickens 3/	2	2	1	1	2	2	2	2	2	2
Eggs	214	201	164	173	158	148	150	184	171	141
Honey	1,186	1,173	1,550	991	1,841	999	2,628	1,767	1,877	1,625
Milk (farm value)	15,949	12,460	13,025	12,363	11,230	9,668	11,757	10,223	10,933	10,374
Crops	293,959	300,054	274,143	309,647	283,298	335,319	311,843	350,590	290,711	280,224 1/
Crops (excl. sugarbeets)	240,985	247,660	215,657	257,999	241,163	288,232	261,902	302,850	248,435	233,307
Corn for Grain	14,520	14,169	11,946	9,328	14,347	19,469	17,835	17,690	15,240	11,045
All Wheat	14,675	19,292	17,293	19,776	17,751	36,540	24,003	23,532	16,929	14,122
Oats	2,110	2,561	2,558	2,403	1,860	3,907	3,392	3,515	2,281	2,309
Barley	31,450	36,013	33,919	29,042	22,724	25,196	34,366	27,888	18,778	11,696
All Hay	158,484	162,165	136,270	184,840	167,927	189,756	165,360	215,444	181,395	180,378
Potatoes	3,534	2,340	2,778	3,830	3,403	2,730	1,568	1,061	480	755
Dry Beans	16,212	11,120	10,893	8,780	13,151	10,634	15,378	13,720	13,332	13,002
Sugarbeets	52,974	52,394	58,486	51,648	42,135	47,087	49,941	47,740	42,276	46,917

1/The 1999 value of sugarbeet production is based on 1998 price and 1999 production. The 1999 price is not available until January 2001. The 1999 market year price for other crops is preliminary based on prices through November 1999. Crop value excludes oilseeds and other minor crops.

2/Adjustments made for changes in inventory and for in shipments.

3/Value of sales.

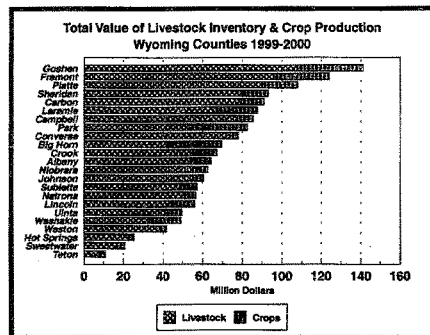
Agriculture's Importance to Wyoming Counties ...

The following estimates of the county value of livestock inventories are based on State average inventory values multiplied by county livestock inventory estimates. The reference date for cattle and sheep is January 1, 2000 and for hogs is December 1, 1999. The value of livestock also includes 1999 wool and milk production apportioned to counties based on the number of sheep and milk cows. For crops, the 1999 county production estimates are multiplied by preliminary marketing year average prices for the State. The previous year price is used for sugarbeets. Crops include alfalfa and other hay, all wheat, barley, oats, corn grain and silage, dry beans, sugarbeets, and potatoes.

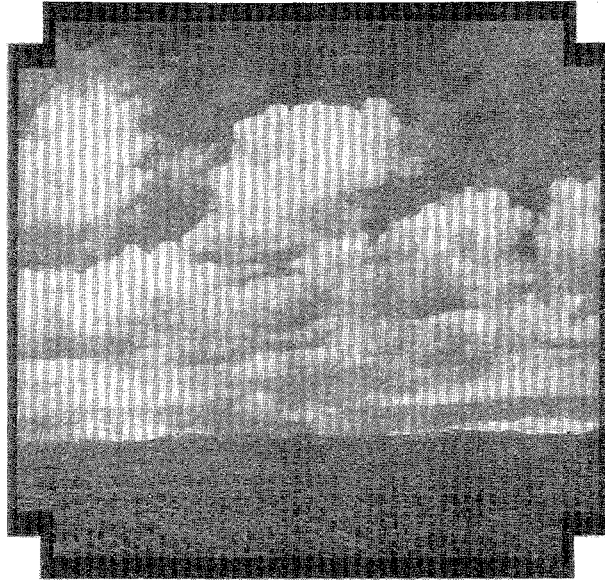
County	No. of Farms 1/	Land in Farms 1/	Total Public Land 2/	Total Private Land 2/	Value of Livestock Inventory	Value of Crop Production	Total Value	Rank Among Wyoming Counties
			1,000 Acres			Million Dollars		
Albany	315	1,922.3	847.1	1,918.3	53.9	10.3	64.2	12
Big Horn	495	443.4	1,894.1	124.6	42.4	27.1	69.5	10
Campbell	531	2,943.6	729.4	2,314.5	77.8	7.9	85.7	7
Carbon	310	2,281.7	2,975.7	2,116.3	79.2	12.0	91.2	5
Converse	348	2,515.3	662.6	2,062.6	71.8	6.3	78.1	9
Crook	498	1,689.6	384.4	1,448.8	54.1	13.0	67.1	11
Fremont	983	2,618.9	5,192.1	711.9	96.0	28.1	124.1	2
Goshen	688	1,266.0	123.0	1,305.4	107.6	33.7	141.3	1
Hot Springs	147	944.2	657.3	636.7	22.6	2.8	25.4	21
Johnson	315	2,131.6	1,076.1	1,591.0	55.3	5.1	60.4	14
Laramie	615	1,728.4	182.9	1,537.1	65.2	22.6	87.8	6
Lincoln	504	408.4	2,060.8	551.3	44.5	11.7	56.2	17
Natrona	311	2,806.7	1,885.5	1,548.6	51.0	5.7	56.7	16
Niobrara	278	1,608.3	291.1	1,387.6	56.9	5.7	62.6	13
Park	588	1,016.4	3,774.4	685.3	53.6	29.1	82.7	8
Platte	461	1,284.8	266.7	1,082.3	90.2	17.8	108.0	3
Sheridan	568	1,608.2	567.5	1,050.7	80.2	13.1	93.3	4
Sublette	275	591.8	2,561.2	591.9	49.3	8.0	57.3	15
Sweetwater	160	1,421.0	4,848.7	1,860.1	16.9	3.9	20.8	22
Teton	104	52.4	2,675.0	25.1	8.0	3.0	11.0	23
Uinta	300	940.0	619.7	716.7	41.1	8.5	49.6	18
Washakie	205	450.0	1,066.6	366.6	33.3	15.9	49.2	19
Weston	233	1,420.6	441.6	1,091.7	38.8	3.2	42.0	20
State Total	9,232	34,088.7	35,783.6	26,725.1	1,289.7	294.5	1,584.2	

1/1997 Census of Agriculture

2/From "The Equality State Almanac", 1997, Wyoming Department of Administration and Information.



WEATHER



**AVERAGE MONTHLY AND ANNUAL TEMPERATURES:
SELECTED STATIONS AND DRAINAGE AREAS, WYOMING 1999**

Station	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
													Average	Change from Normal
Fahrenheit														
NW DISTRICT														
Basin	24.3	33.8	40.5	44.3	54.8	64.5	72.4	72.7	56.2	47.5	39.3	22.2	47.7	2.90
Cody	30.0	36.4	41.0	42.6	51.9	61.8	70.0	69.9	55.8	51.9	46.7	33.5	49.3	3.60
Lander A.P.	29.4	31.9	39.2	37.3	50.7	60.3	70.7	70.7	55.0	48.1	41.3	29.3	47.0	2.40
Lovell	25.9	33.8	39.6	42.4	53.1	62.5	70.1	69.9	54.4	46.7	40.3	24.2	46.9	2.20
Pavilion	31.0*	32.7*	39.7	40.9	51.3	60.2	69.8*	68.3	54.2	47.0	43.3*	*	*	*
Powell F.S.	25.6	33.1	39.7	41.7	52.6	62.8	68.6	69.9	54.5	46.4	40.6	26.3	46.8	1.80
Riverton	*	*	*	41.0	53.1	62.9	71.9	71.0	55.3	46.7	37.8*	27.3	*	*
Thermopolis	29.3	37.6*	43.4*	44.4*	54.9	65.3	74.3	74.0	58.9	51.7	45.4	31.6*	50.9*	4.90
Worland	23.8	32.6	40.2	43.5*	54.0	64.7	73.3*	72.6	56.1	48.2	40.0	24.2	47.8*	3.00
NE DISTRICT														
Buffalo	28.0	34.2*	39.3	41.2*	51.1	61.6	71.2	71.4	55.6	50.0*	44.9*	31.1*	48.3*	3.00
Colony	25.6	35.9	*	42.6*	53.8	*	71.4	72.3	56.3	49.2	44.2	33.1	*	*
Gillette 6SE	26.3	34.2	38.1	39.8	50.6	61.9*	70.5	70.0	54.5	48.6	44.3	30.8	47.5*	3.30
Kaycee	26.5	32.0	38.2	38.7	52.4	62.7	72.0	70.8	55.8	47.5	44.7	30.8	47.7	3.40
Moorecroft	23.3*	33.0*	37.0*	39.4*	50.7*	60.0*	70.2*	70.0	54.6*	48.0	43.4*	28.9*	46.5*	1.40
Newcastle	26.1	35.0	40.8	44.5	54.1	63.1	73.1	72.6	57.7	49.8	43.4	30.3	49.2	2.40
Sheridan A.P.	26.0	34.8	37.0	40.8	49.7	60.4	69.6	70.9	54.6	47.8	42.4	31.8	47.2	2.50
Sundance	23.3*	32.8	36.4	40.9*	49.5	59.9	69.4*	69.1*	53.0	48.5*	43.2	29.9	46.4*	2.50
WEST DISTRICT														
Alton	*	21.5*	27.7*	*	*	54.1*	62.9*	62.8*	*	44.9*	35.1*	*	*	*
Evansston 1E	25.3	25.5	34.3	36.9	46.6	56.0	62.9	61.5	50.5*	45.4	38.1	21.3	42.0*	1.00
Jackson	23.3	23.5	30.3*	37.2	45.7*	54.8*	61.4	62.4	51.5	44.5	34.2	20.8	46.8*	2.80
Kemmerer 2N	20.8	17.2	26.2	31.7	42.5*	*	*	*	*	*	32.2	*	*	*
Moran SWNW	18.4	19.2	25.7	32.8	41.5	50.9	*	59.2	47.4	40.8	31.7	*	*	*
Pinedale	17.8	17.8*	*	32.9*	*	*	*	*	*	*	*	*	*	*
SC DISTRICT														
Casper A.P.	27.6	32.9	37.7	39.1	49.9	60.9	71.8	70.0	54.4	47.2	43.8	29.9	47.1	2.00
Green River	28.5*	28.3	39.1	40.3	*	60.0	*	68.2*	54.2*	*	*	25.0*	*	*
Laramie A.P.	24.8	29.1	34.1	34.2	45.8	55.8	65.1	62.7	49.9	43.9	38.4	22.0	42.2	1.80
Rawlins A.P.	28.2	29.1	37.9	39.2	49.5	58.7	69.3	67.4	55.4	49.1	42.3*	27.6*	46.1*	3.00
Rock Springs A.P.	26.2	25.9	36.1	36.4	47.1	58.6	68.3	66.7	53.0	47.9	38.3	*	*	*
Saratoga	27.8	30.1	37.7	39.6	49.1	59.8	68.3*	64.9	53.2*	45.3	39.3	24.5*	45.0*	2.20
Wamsutter	25.4	24.6	36.1	36.5	47.2	57.9	68.0	65.6	52.5	46.5*	37.3	22.1	43.3*	2.20
SE DISTRICT														
Albia	31.4	36.7	40.3*	41.8*	52.6*	63.5*	71.9*	69.8	57.5	51.1	46.0	32.2	49.6*	2.50
Carpenter	31.9	36.9	40.3*	41.8	53.6	63.6	72.0	68.9	57.1	50.3	44.4	33.2	49.5*	2.40
Cheyenne A.P.	30.8	34.6	37.6	38.4	50.5	60.3	70.0	67.7	54.0	47.6	44.0	32.0	47.3	1.70
Chugwater	31.2	34.7	39.1	39.4	51.6	61.3	71.1	*	54.8	48.1	44.9	32.3	*	*
Douglas 1SE	28.4*	35.8*	39.8	40.6*	53.1*	*	72.4	70.4*	54.7*	48.0	43.9*	31.8*	*	*
Lagrange	28.5	33.6	39.0	44.3*	55.8	64.7	73.8*	71.9	59.1	52.4	46.0	34.4	50.3*	2.50
Torrington	30.3	37.7	40.7	43.3	55.6	65.6	73.4	70.8*	58.1	48.8	42.7	32.8	50.0*	2.40
Wheatland 4N	33.8	40.4*	42.6*	43.4	54.6*	64.0	73.5*	72.8	57.7	52.5	48.4	35.1	51.6*	2.60
DRAINAGE AREA														
Yellowstone	20.9	23.1	29.1	33.4	43.3	52.3	62.7	63.8	48.5	43.2	35.3	20.6	39.7	1.60
Snake	18.4	18.4	25.0	31.8	41.5	51.2	58.6	59.3	46.7	40.6	32.5	15.9	36.9	1.0
Green & Bear	21.7	21.1	31.2	35.0	45.2	55.2	63.7	62.5	50.2	42.9	33.9	20.1	40.2	1.00
Big Horn	26.9	33.7	39.7	41.7	51.8	61.6	70.0	70.0	54.7	48.2	42.2	28.0	47.4	2.80
Powder, Little MO & Tongue	26.2	33.1	38.3	38.9	49.5	60.0	70.7	69.7	54.9	47.3	42.4	29.9	46.7	2.80
Belle Fourche	25.0	33.8	37.5	40.6	51.1	61.0	70.2	69.9	54.1	47.7	42.9	29.8	47.0	2.80
Cheyenne & Niobrara	26.8	35.2	38.8	41.8	52.5	62.1	71.7	71.2	55.8	48.8	42.4	30.4	48.1	2.40
Lower Platte	30.2	35.6	39.1	40.6	52.1	61.9	71.3	69.1	55.5	48.9	44.1	32.0	48.4	2.00
Wind River	28.8	30.7	37.6	38.4	49.8	58.8	68.4	67.9	53.1	46.6	40.1	28.1	45.7	2.00
Upper Platte	25.1	26.9	34.5	35.2	45.7	56.6	65.6	63.5	50.1	45.0	38.2	23.9	42.5	2.00

Source: Climatological Data, U. S. Dept. of Commerce, NOAA.

* = Data are partially or entirely missing.

See River Drainage Area Map on Page 34.

**MONTHLY AND ANNUAL PRECIPITATION:
SELECTED STATIONS AND DRAINAGE AREAS, WYOMING 1999**

Station	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	
													Total	Change from Normal
NW DISTRICT														
	Inches													
Basin	.23	.12	.27	1.18	1.73	.55	.08	.14	.84	.05	.06	.66	5.91	-76
Cody	.38	0	.20	3.50	1.98	2.47	.40	2.54	.86	.53	.06	.28	13.20	3.44
Lander A.P.	.10	.65	.71	6.44	.97	1.09	.11	.58	2.01	.65	.03	.15	13.49	.48
Lovell	.08*	.12	0	.87	.82	.73	.01	.12	.45	.29	.09	.50	4.08*	2.77
Pavillion	0	0	.16	4.04	.60	.26	.10	.36	1.57	.42	0*	*	*	*
Powell F.S.	.06	.03	0	1.56	.80	.67	.49	.23	.60	.40	.20	.35	5.39	1.60
Riverton	*	*	.01	3.69	.97	.92	.04	.47	2.47	.28	.16	.02	*	*
Thermopolis	.23	.12	.06*	4.23	1.82	1.07	.23	1.71	1.59	.37	.26	.13	11.82*	-20
Worland	.24	0	.22	1.41	2.58	1.08	.31	.60	1.48	.30	.08	.16	8.46	1.21
NE DISTRICT														
Buffalo	.22*	0*	.67	3.06	1.43	2.63	0	.45	2.11	.31	0	0*	10.88*	-2.81
Colony	.04	.07	*	2.82*	1.88	3.44	1.22	1.55	1.05	.55	.20	.07*	*	*
Gillette 6SE	.81	.32	1.69	4.76	1.93	3.17*	1.11	1.06	2.03	.21	.49	.83	18.41*	1.80
Kaycee	.14	.25	.55	2.24	1.51	.89	.35	.54	1.52	.47	.43	.11*	9.00*	-3.88
Moorcroft	.40	.12*	.44*	2.40	1.50	4.74	1.05	1.68	1.02	.15	.15	.16	13.81*	.28
Newcastle	1.22	.21	.96	2.11	2.77	6.35	1.53	2.55	1.11	.25	.57	.38	20.01	5.46
Sheridan A.P.	.50	.10	.61	3.51	1.94	1.71	.02	.36	2.69	.72	.28	.63	13.07	-1.41
Sundance	1.11	.65	1.05	4.11*	2.03	5.31	1.37	4.25	1.04	0	.28	.73	21.93*	4.47
WEST DISTRICT														
Afton	.86	1.42*	.97	1.44	1.57	1.92	.09	2.11	1.17	.34	.42	1.25	13.56*	-6.04
Evanston 1E	1.01	.51*	.76	2.67	2.41	.95	.68	.90	1.17	.20	.04	.90	12.20*	.95
Jackson	*	2.17*	*	1.98*	1.71*	*	.58*	.99	1.33*	.32*	*	.69*	*	*
Kemmerer 2N	.82	1.03*	0*	1.38	.55*	*	*	*	*	*	0	*	*	*
Moran SWNW	4.85	5.05	1.10	2.00	1.90	2.51	*	2.20	1.30	.25	2.05	*	*	*
Pinedale	.68	.68*	*	2.37	*	*	*	*	*	*	*	*	*	*
SC DISTRICT														
Casper A.P.	.22	.30	.45	1.53	2.29	1.78	.24	.11	1.30	.25	.36	.10	8.93	-9.59
Green River	.85	1.18	.09	2.38	2.88	.56	.34	.87*	1.66	*	.14*	.32*	*	*
Laramie A.P.	.47	.02	.28	1.21	1.51	1.02	.81	.90	1.33	.18	.15	.21	8.09	-2.79
Rawlins A.P.	.40	.96	.22	2.01	1.63	1.99	1.42	.62	1.21*	.09	.16	.15	10.26*	1.33
Rock Springs A.P.	.46	.71*	.59	2.74	2.49	.36	.62	.54	.68	.05	.01	*	*	*
Saratoga	.70	.18	.24	1.03	1.53	1.96	1.38	.64	1.39	.14	.57	.21	9.37	-8.88
Wamsutter	.50*	.53	.15	2.91*	1.15	.61	1.68	.81	1.14	0*	.03	.31*	9.42*	-2.20
SE DISTRICT														
Albia	.29	.21*	.60	3.89	2.10	1.07	1.58	2.00	2.65	.16	.25	.73	15.53*	-2.97
Carpenter	.13*	.11	.38	3.94	2.30	1.62	3.27	4.92	2.79	.40	.16	.09	20.11*	-6.25
Cheyenne A.P.	.35	.13	.46	5.02	2.04	2.13	2.38	.78	2.11	.27	.25	.19	16.17	1.71
Chugwater	.44	.25	.37	2.73	1.99	2.29	.75	*	1.59	.49	.18	.72*	*	*
Douglas 1SE	.94	.25	.63	5.14	2.15	*	.45	.20	2.94	.43	.58	.23	*	*
Lagrange	.19	.10	.58	3.07	1.95	2.21	1.26	1.67	1.79	.20	.17	.56	17.75	-2.74
Torrington	.03	.34	.61	2.54	2.13	2.67	.63	.69	2.32	.15	.26	.11	12.45	1.01
Wheatland 4N	.24	.02	.26	2.93	2.17	3.44	1.44	1.37	2.86	.28	.11	.09	15.26	-6.18
DRAINAGE AREA														
Yellowstone	.55	.68	.57	1.41	1.57	2.19	.61	2.72	.41	.43	.40	1.20	12.78	-2.97
Snake	3.79	4.45	1.30	1.96	2.60	2.49	.83	1.80	1.34	.43	1.36	1.67	24.00	-2.10
Green & Bear	.59	.82	.36	2.35	1.44	.91	.85	.79	1.18	.06	.07	.32	7.19	-1.19
Big Horn	.26	.10	.19	2.12	2.07	1.15	.25	.84	1.16	.32	.15	.37	8.56	-1.56
Powder, Little MO & Tongue	.33	.44	.63	3.26	2.31	2.20	.43	.74	1.82	.49	.36	.70	13.77	-1.77
Belle Fourche	.53	.34	1.12	3.14	1.79	4.45	1.72	1.68	1.21	.25	.54	.55	17.90	-1.90
Cheyenne & Niobrara	.57	.16	.55	3.00	1.94	5.96	1.12	1.22	1.87	.15	.48	.36	17.00	-2.00
Lower Plate	.31	.19	.45	3.36	2.16	2.49	1.44	1.17	2.20	.29	.29	.23	16.50	-1.50
Wind River	.09	.23	.19	4.12	1.48	.88	.17	.48	1.79	.34	.18	.06	10.01	-1.01
Upper Plate	.89	.39	.34	2.40	1.74	1.21	.67	.61	1.04	.23	.45	.31	10.24	-1.24

Source: Climatological Data, U.S. Dept. of Commerce, NOAA.

* = Data are partially or entirely missing.
See River Drainage Area Map on Page 34.

SPRING FREEZE HAZARD TABLE

This table shows the probability of the temperature dropping below 32° or 28° later in the spring than indicated.

Station	Below 32°			Below 28°		
	90%	50%	10%	90%	50%	10%
Afton	Jun 24	Jul 10	Jul 26	May 22	Jun 13	Jul 04
Albin	May 03	May 19	Jun 02	Apr 20	May 07	May 25
Alta 1NNW	Jun 11	Jun 30	Jul 20	May 09	May 31	Jun 22
Alva SSE	May 21	Jun 13	Jul 05	May 12	May 26	Jun 08
Archer	May 09	May 24	Jun 08	Apr 28	May 12	May 26
Basin	Apr 26	May 13	May 30	Apr 16	Apr 29	May 12
Bondurant 3NW	Jul 25	Jul 29	Aug 01	Jul 08	Jul 20	Jul 31
Border 3N	Jun 07	Jul 01	Jul 25	May 18	Jun 14	Jul 10
Boysen Dam	Apr 18	May 05	May 23	Apr 04	Apr 20	May 07
Buffalo Bill Dam	Apr 21	May 05	May 18	Apr 05	Apr 21	May 07
Carpenter 3E	May 07	May 20	Jun 02	Apr 26	May 11	May 26
Casper 2E	May 02	May 19	Jun 06	Apr 21	May 06	May 21
Casper WSO	May 04	May 22	Jun 08	Apr 18	May 06	May 23
Chugwater	May 16	Jun 03	Jun 20	May 02	May 16	May 30
Cody	May 02	May 18	Jun 03	Apr 19	May 03	May 16
Colony	Apr 25	May 12	May 30	Apr 16	May 01	May 16
Crandall Creek	Jun 20	Jul 08	Jul 27	May 22	Jun 15	Jul 09
Denver	May 07	May 22	Jun 06	Apr 23	May 08	May 24
Dillingar	May 10	May 29	Jun 16	Apr 28	May 14	May 29
Diversion Dam	May 08	May 25	Jun 11	Apr 24	May 10	May 25
Dixon	May 27	Jun 13	Jun 29	May 09	May 27	Jun 14
Dull Center 1SE	May 03	May 17	May 31	Apr 20	May 04	May 17
Elk Mountain	May 27	Jun 14	Jul 02	May 15	Jun 01	Jun 17
Encampment 10ESE	May 22	Jun 08	Jun 26	May 09	May 29	Jun 18
Evanson 1E	Jun 09	Jun 28	Jul 17	May 19	Jun 10	Jul 02
Faxon	Jun 15	Jun 29	Jul 13	May 16	Jun 09	Jul 02
Gillette 2E	May 04	May 19	Jun 02	Apr 18	May 05	May 22
Gillette 18SW	May 12	May 27	Jun 10	Apr 26	May 11	May 26
Glenrock SESE	Apr 30	May 15	May 31	Apr 16	May 02	May 17
Green River	May 12	Jun 02	Jun 22	May 02	May 19	Jun 06
Heart Mountain	May 03	May 19	Jun 04	Apr 26	May 09	May 22
Jackson	Jun 28	Jul 13	Jul 28	May 26	Jun 21	Jul 17
Kaycee	May 12	May 30	Jun 17	Apr 27	May 13	May 29
Lagrange	May 09	May 21	Jun 01	Apr 25	May 10	May 25
Lauder WSO	May 08	May 22	Jun 06	Apr 21	May 06	May 21
Laramie FAA Airport	May 22	Jun 09	Jun 26	May 09	May 23	Jun 06
Lovell	Apr 30	May 17	Jun 03	Apr 19	Apr 30	May 11
Medicine Bow	May 20	Jun 08	Jun 26	May 06	May 23	Jun 09
Midwest 1SW	Apr 30	May 16	Jun 01	Apr 19	May 06	May 22
Moorecroft	May 02	May 19	Jun 06	Apr 17	May 03	May 18
Moran 5WNW	Jun 10	Jul 05	Jul 26	May 16	Jun 10	Jul 04
Newcastle	Apr 29	May 15	May 30	Apr 17	May 01	May 15
Pushfinder Dam	May 05	May 22	Jun 07	Apr 19	May 09	May 29
Pavilion	May 02	May 18	Jun 04	Apr 20	May 05	May 20
Phillips	May 04	May 19	Jun 02	Apr 23	May 09	May 25
Powell	Apr 23	May 10	May 26	Apr 13	Apr 27	May 11
Redbird 1NW	May 10	May 23	Jun 06	Apr 23	May 09	May 24
Riverton	May 07	May 23	Jun 08	Apr 26	May 10	May 24
Rochelle 3E	May 11	May 29	Jun 15	Apr 23	May 12	May 31
Rock Springs	May 08	May 25	Jun 11	Apr 23	May 13	May 30
Saratoga	May 04	Jun 08	Jun 23	May 07	May 22	Jun 07
Seminole Dam	May 15	May 28	Jun 11	Apr 30	May 13	May 26
Sheridan WSO	May 02	May 20	Jun 06	Apr 20	May 04	May 19
Sheridan Field Station	Apr 29	May 27	Jun 24	Apr 17	May 11	Jun 04
Sundance	May 12	May 27	Jun 12	Apr 22	May 08	May 23
Thermopolis	May 05	May 25	Jun 15	Apr 20	May 05	May 21
Torrington Exp. Farm	May 03	May 17	May 31	Apr 21	May 02	May 13
Upton	May 10	Jun 01	Jun 24	Apr 27	May 14	May 30
Whalen Dam	Apr 27	May 13	May 28	Apr 18	Apr 29	May 10
Whitestand 4N	May 02	May 16	May 29	Apr 13	Apr 30	May 17
Worland	Apr 23	May 11	May 26	Apr 16	Apr 29	May 12
Yellowstone Park	May 22	Jun 15	Jul 09	May 02	May 28	Jun 24
Yoder	May 07	May 19	Jun 01	Apr 27	May 10	May 24

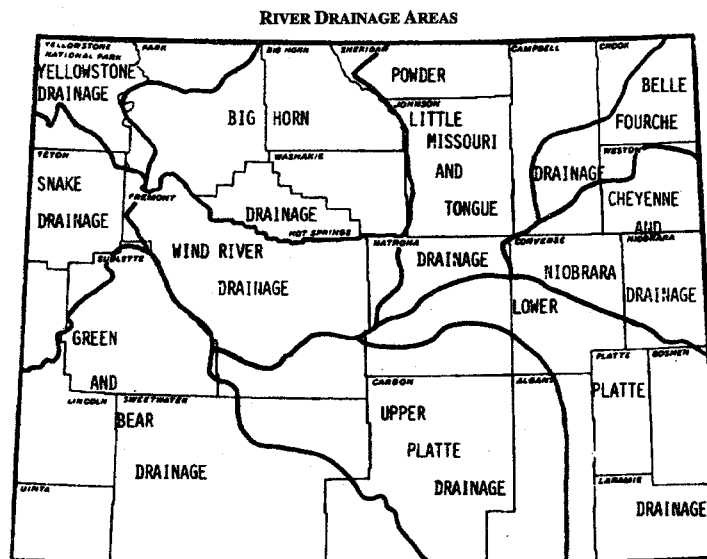
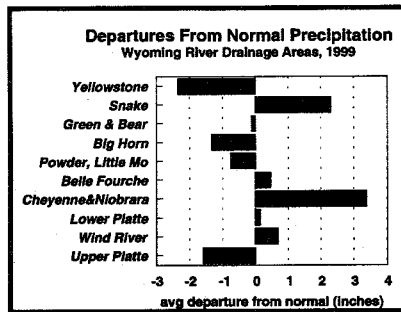
Source: "Freeze/Frost Data," January 1988, National Climatic Data Center, U.S. Dept. of Commerce, NOAA.

FALL FREEZE HAZARD TABLE

This table shows the probability of the temperature dropping below 32° or 28° earlier in the fall than indicated.

Station	Below 32°			Below 28°		
	10%	50%	90%	10%	50%	90%
Afton	Aug 02	Aug 19	Sep 06	Aug 16	Sep 04	Sep 22
Albin	Sep 10	Sep 24	Oct 08	Sep 18	Oct 04	Oct 20
Alta INN	Aug 12	Aug 30	Sep 18	Aug 28	Sep 13	Sep 29
Alva SSE	Aug 15	Sep 01	Sep 18	Sep 01	Sep 14	Sep 27
Archer	Sep 09	Sep 22	Oct 05	Sep 17	Oct 03	Oct 18
Basin	Sep 06	Sep 21	Oct 05	Sep 20	Oct 02	Oct 13
Bondurant 3NW	Jul 31	Aug 03	Aug 06	Jul 31	Aug 07	Aug 16
Borger 3N	Aug 06	Aug 20	Sep 04	Aug 18	Sep 01	Sep 16
Boysen Dam	Sep 19	Oct 08	Oct 28	Oct 07	Oct 23	Nov 07
Buffalo Hill Dam	Sep 19	Oct 08	Oct 27	Oct 01	Oct 22	Nov 13
Carpenter 3E	Sep 10	Sep 24	Oct 07	Sep 16	Sep 30	Oct 13
Casper 2E	Sep 03	Sep 19	Oct 04	Sep 17	Sep 30	Oct 13
Casper WSO	Sep 07	Sep 22	Oct 07	Sep 18	Oct 05	Oct 21
Chugwater	Aug 29	Sep 10	Sep 22	Sep 04	Sep 19	Oct 03
Cody	Sep 07	Sep 21	Oct 05	Sep 13	Sep 30	Oct 16
Colony	Sep 11	Sep 26	Oct 10	Sep 23	Oct 10	Oct 27
Crandall Creek	Aug 05	Aug 18	Aug 31	Aug 18	Sep 06	Sep 25
Deaver	Sep 03	Sep 17	Sep 30	Sep 10	Sep 24	Oct 07
Dillingen	Aug 30	Sep 14	Sep 28	Sep 08	Sep 22	Oct 07
Diversion Dam	Aug 31	Sep 15	Oct 01	Sep 10	Sep 26	Oct 11
Dixon	Aug 23	Sep 05	Sep 18	Aug 30	Sep 14	Sep 28
Dull Center 1SE	Sep 06	Sep 18	Sep 30	Sep 16	Sep 29	Oct 13
Elk Mountain	Aug 21	Sep 03	Sep 17	Aug 30	Sep 13	Sep 27
Encampment 10ESE	Aug 20	Sep 08	Sep 27	Sep 01	Sep 16	Oct 01
Evanston 1E	Aug 09	Aug 26	Sep 12	Aug 22	Sep 08	Sep 25
Faxon	Aug 08	Aug 25	Sep 10	Aug 21	Sep 03	Sep 15
Gillette 2E	Sep 03	Sep 20	Oct 07	Sep 13	Oct 01	Oct 19
Gillette 18SW	Aug 31	Sep 16	Oct 03	Sep 10	Sep 27	Oct 14
Glenrock 5ESE	Sep 04	Sep 19	Oct 03	Sep 18	Oct 01	Oct 15
Green River	Aug 19	Sep 07	Sep 27	Sep 07	Sep 20	Oct 03
Heart Mountain	Sep 02	Sep 16	Sep 30	Sep 11	Sep 27	Oct 14
Jackson	Jul 31	Aug 12	Aug 24	Aug 10	Aug 26	Sep 11
Kaycee	Aug 28	Sep 11	Sep 25	Sep 07	Sep 22	Oct 07
Lagrange	Sep 02	Sep 16	Sep 29	Sep 16	Sep 29	Oct 12
Lander WSO	Sep 09	Sep 24	Oct 10	Sep 19	Oct 05	Oct 21
Laramie FAA Airport	Aug 26	Sep 10	Sep 24	Sep 07	Sep 21	Oct 05
Lovell	Sep 04	Sep 18	Oct 01	Sep 16	Oct 01	Oct 16
Medicine Bow	Aug 21	Sep 04	Sep 17	Aug 31	Sep 13	Sep 25
Midwest 1SW	Sep 05	Sep 20	Oct 05	Sep 15	Sep 30	Oct 16
Moencroft	Sep 07	Sep 21	Oct 05	Sep 15	Sep 30	Oct 15
Moran 5WNW	Aug 05	Aug 21	Sep 05	Aug 21	Sep 07	Sep 24
Newcastle	Sep 08	Sep 25	Oct 12	Sep 23	Oct 07	Oct 21
Pathfinder Dam	Sep 07	Sep 22	Oct 07	Sep 12	Oct 02	Oct 21
Pavillion	Sep 07	Sep 22	Oct 07	Sep 17	Oct 04	Oct 21
Phillips	Sep 01	Sep 16	Sep 30	Sep 14	Sep 29	Oct 13
Powell	Sep 10	Sep 26	Oct 11	Sep 20	Oct 07	Oct 24
Redbird 1NW	Aug 31	Sep 16	Oct 01	Sep 12	Sep 25	Oct 09
Riverton	Sep 02	Sep 14	Sep 26	Sep 13	Sep 25	Oct 08
Rochelle 3E	Aug 30	Sep 11	Sep 23	Sep 06	Sep 20	Oct 03
Rock Springs	Sep 01	Sep 16	Oct 10	Sep 11	Sep 26	Oct 12
Saratoga	Aug 24	Sep 08	Sep 23	Sep 05	Sep 19	Oct 03
Seminole Dam	Sep 08	Sep 22	Oct 06	Sep 14	Oct 01	Oct 17
Sheridan WSO	Sep 07	Sep 20	Oct 04	Sep 15	Oct 01	Oct 18
Sheridan Field Station	Aug 29	Sep 15	Oct 02	Sep 09	Sep 26	Oct 12
Sundance	Sep 01	Sep 16	Oct 01	Sep 16	Oct 02	Oct 17
Thermopolis	Sep 05	Sep 20	Oct 04	Sep 14	Sep 29	Oct 13
Torrington Exp. Farm	Sep 03	Sep 17	Oct 01	Sep 16	Sep 27	Oct 08
Upton	Aug 29	Sep 14	Sep 30	Sep 08	Sep 23	Oct 08
Whalen Dam	Sep 10	Sep 23	Oct 05	Sep 18	Oct 02	Oct 15
Wheatland 4N	Sep 05	Sep 20	Oct 05	Sep 15	Oct 01	Oct 17
Worldand	Sep 03	Sep 18	Oct 04	Sep 14	Oct 01	Oct 17
Yellowstone Park	Aug 20	Sep 06	Sep 22	Aug 29	Sep 16	Oct 05
Yoder	Sep 02	Sep 16	Sep 30	Sep 12	Sep 26	Oct 10

Source: "Freeze/Thaw Data," January 1988, National Climatic Data Center, U.S. Dept. of Commerce, NOAA.



LIVESTOCK



LIVESTOCK



The number of **cattle and calves** on Wyoming farms and ranches increased 1 percent during 1999 from 1,560,000 head on January 1, 1999 to 1,580,000 head on January 1, 2000. The total was 5 percent below two years earlier and unchanged from January 1, 1997. The inventory of beef cows remained the same at 824,000 head. Beef cow replacement heifers rose 22 percent to 195,000 head. The total inventory of other heifers, steers, and all calves under 500 pounds was off 3 percent from the previous year. The 1999 calf crop, at 830,000 calves, was unchanged from 1998 but 5 percent less than in 1997. The January 1, 2000 average value per head for all cattle and calves was \$770, up from \$650 a year earlier.



The number of **milk cows** in Wyoming herds during 1999 averaged 6,000 head, down from 6,100 in 1998. Milk production in 1999, at 79.8 million pounds, was unchanged from 1998. This remains the lowest annual production on record. Average production per cow rose 218 pounds to 13,300 pounds. The average price per hundredweight received for milk was down \$0.70 to \$13.00 in 1999.



The number of **hogs and pigs** in Wyoming on December 1, 1999, was 105,000 head, down 25 percent from a year earlier. Breeding inventory decreased 2,000 head to 18,000 and market hogs and pigs dropped 33,000 head to 87,000. The 1999 pig crop totaled 249,000 pigs, down 19 percent from 1998. The average value per head for hogs and pigs rose from \$53.00 on December 1, 1998 to \$86.00 on December 1, 1999.



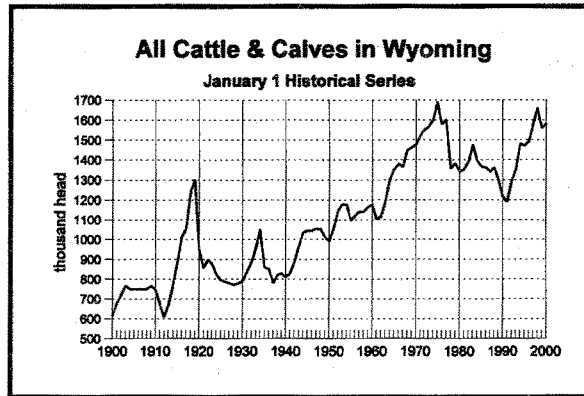
Sheep and lamb inventory in Wyoming on January 1, 2000 totaled 570,000 head, down 10 percent from the year before. Breeding sheep, including ewes, rams, and replacement lambs, dropped 4 percent from the previous year to 460,000 head. The 1999 lamb crop totaled 390,000 lambs, down 11 percent from 1998. An average of 101 lambs were saved per 100 ewes. The January 1, 2000 value per head for sheep and lambs averaged \$90.00, up from \$87.00 the year before.

Sheep and lamb losses to all causes during 1999 totaled 88,000 head, down 15 percent from 1998. Losses to predators were down 19 percent to 48,000 head which accounted for 55 percent of the total. Lamb predator losses represented 10 percent of all lambs born (before and after docking). Total predator losses were valued at \$2.43 million and all losses at \$4.76 million.

Wyoming sheep and lambs produced 4.93 million pounds of **wool** in 1999, down 11 percent from 1998 and a record low. The price per pound averaged 49 cents, down from 77 cents in 1998, and the total value fell 43 percent to \$2.42 million.



There were an estimated 17,000 **chickens** in Wyoming flocks on December 1, 1999, unchanged from a year earlier. An average of 12,000 hens and pullets of laying age produced 3.6 million **eggs** in the 12 month period ending December 1, 1999, unchanged from the previous year.



**CATTLE AND CALVES: NUMBER OF OPERATIONS WITH CATTLE, 1991-99,
AND NUMBER AND VALUE OF CATTLE,
WYOMING JANUARY 1, 1991-2000, U.S. JANUARY 1, 1999-2000**

Year	Operations 1/			Cattle on January 1			
	With Cattle and Calves	With Beef Cows 2/	With Milk Cows 2/	Number	Value		On Feed for Slaughter
					Per Head	Total	
		Number		1,000 Head	Dollars	1,000 Dollars	1,000 Head
1991	5,400	4,800	600	1,190	710.00	844,900	50
1992	5,800	4,900	500	1,290	695.00	896,550	105
1993	5,900	5,100	500	1,350	720.00	972,000	90
1994	6,000	5,200	450	1,480	760.00	1,124,800	95
1995	6,000	5,200	400	1,470	655.00	962,850	100
1996	6,100	5,300	350	1,490	550.00	819,500	95
1997	6,300	5,300	350	1,580	600.00	948,000	80
1998	6,400	5,500	300	1,660	720.00	1,195,200	85
1999	6,300	5,500	300	1,560	650.00	1,014,000	100
2000	3/	3/	3/	1,580	770.00	1,216,600	90
U.S.							
1999	1,095,960	843,230	111,220	99,115.0	594.00	58,833,650	13,219
2000	3/	3/	3/	98,048.0	683.00	67,011,240	13,983

1/Any operation having one or more head on hand at anytime during the year.

2/Included in operations with cattle.

3/Data not available at time of publication.

**CATTLE AND CALVES: NUMBER ON FARMS AND RANCHES,
WYOMING JANUARY 1, 1994-2000, U.S. JANUARY 1, 1999-2000**

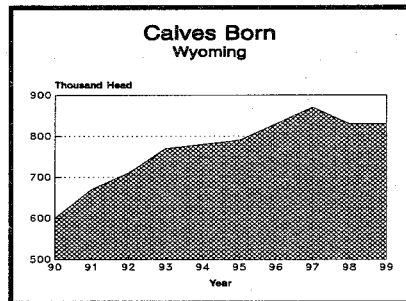
Year	All Cattle and Calves	All Cows that have Calved	Beef Cows that have Calved	Milk Cows that have Calved
1,000 Head				
1994	1,480	790	783	7
1995	1,470	780	773	7
1996	1,490	810	804	6
1997	1,580	870	863	7
1998	1,660	880	874	6
1999	1,560	830	824	6
2000	1,580	830	824	6
U.S.				
1999	99,115.0	42,878.4	33,745.4	9,133.0
2000	98,048.0	42,733.8	33,546.0	9,187.8

Year	Heifers 500 Pounds and Over			Steers 500 Pounds and Over	Bulls 500 Pounds and Over	Steers, Heifers and Bulls Under 500 Pounds
	Beef Cow Replacements	Milk Cow Replacements	Other			
1,000 Head						
1994	190	1	159	190	50	100
1995	185	1	134	185	45	140
1996	150	1	169	185	50	125
1997	175	1	169	200	50	115
1998	195	1	184	190	50	160
1999	160	1	189	200	50	130
2000	195	1	184	195	50	125
U.S.						
1999	5,535.3	4,068.8	10,170.1	16,890.9	2,281.1	17,290.4
2000	5,529.8	3,953.7	10,044.8	16,652.2	2,293.7	16,840.0

**CATTLE AND CALVES: NUMBER ON FARMS AND RANCHES,
U.S. JULY 1, 1995-99**

Year	All Cattle and Calves	All Cows that have Calved	Beef Cows that have Calved	Milk Cows that have Calved
1,000 Head				
1995	113,000	45,600	36,100	9,500
1996	111,600	45,100	35,700	9,400
1997	109,200	44,100	34,800	9,300
1998	107,700	43,600	34,400	9,200
1999	107,000	43,300	34,150	9,150

Year	Heifers 500 Pounds and Over			Steers 500 Pounds and Over	Bulls 500 Pounds and Over	Steers, Heifers and Bulls Under 500 Pounds
	Beef Cow Replacements	Milk Cow Replacements	Other			
1,000 Head						
1995	5,700	3,900	8,000	15,400	2,400	32,000
1996	5,500	3,700	8,100	15,100	2,400	31,700
1997	5,300	3,600	8,200	14,800	2,300	30,900
1998	5,000	3,600	8,100	14,600	2,200	30,600
1999	4,800	3,700	8,100	14,400	2,200	30,500



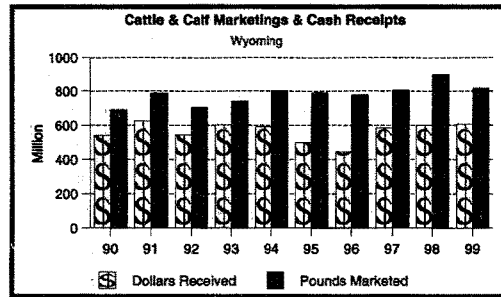
39
L
I
V
E
S
T
O
C
K

**CATTLE AND CALVES: INVENTORY, SUPPLY, AND DISPOSITION,
WYOMING 1990-99, U.S. 1998-99**

Year	Inventory Beginning of Year	Calves Born	Inshipments	Marketings 1/	
				Cattle	Calves
1,000 Head					
1990	1,220	600	320	750	154
1991	1,190	670	500	890	134
1992	1,290	710	300	800	109
1993	1,350	770	360	780	169
1994	1,480	780	310	840	214
1995	1,470	790	330	840	214
1996	1,490	830	340	835	194
1997	1,580	870	360	860	209
1998	1,660	830	320	950	249
1999	1,560	830	330	870	219
U.S.					
1998	99,744.0	38,812.1	21,938.6	47,226.7	9,729.1
1999	99,115.0	38,710.4	22,792.4	48,386.2	9,856.4

Year	Farm Slaughter 2/	Deaths		Inventory End of Year
		Cattle	Calves	
1,000 Head				
1990	1	15	30	1,190
1991	1	15	30	1,290
1992	1	15	25	1,350
1993	1	15	35	1,480
1994	1	15	30	1,470
1995	1	15	30	1,490
1996	1	15	35	1,580
1997	1	20	60	1,660
1998	1	15	35	1,560
1999	1	15	35	1,580
U.S.				
1998	214.4	1,668.0	2,541.5	99,115.0
1999	213.4	1,659.0	2,454.8	98,048.0

1/Includes custom slaughter for use on farms where produced, but excludes interfarm sales within Wyoming.
2/Excludes custom slaughter for farms at commercial establishments.



CATTLE AND CALVES: PRODUCTION AND INCOME, WYOMING 1990-99, U.S. 1998-99

Year	Production 1/	Marketings 2/	Average Price per 100 Pounds	
			Cattle	Calves
1,000 Pounds		Dollars		
1990	453,290	688,330	76.30	101.00
1991	548,200	787,460	77.70	101.00
1992	552,870	704,330	75.80	95.20
1993	618,186	740,890	79.10	101.00
1994	557,334	799,630	72.30	85.00
1995	590,465	789,140	62.40	70.20
1996	631,483	776,740	56.50	62.70
1997	608,409	803,050	70.70	88.90
1998	604,007	895,050	64.60	84.90
1999	613,065	815,550	71.70	95.40
U.S.				
1998	41,620,414	55,255,981	59.60	78.80
1999	42,344,417	56,747,945	63.40	87.70

Year	Value of Production	Cash Receipts 3/	Value of Home Consumption	Gross Income
1,000 Dollars				
1990	359,099	540,411	3,327	543,738
1991	436,418	623,721	2,517	626,238
1992	428,733	542,764	4,957	547,721
1993	496,310	601,959	3,556	605,515
1994	413,538	589,547	4,919	594,466
1995	371,823	499,267	4,259	503,526
1996	359,805	443,790	3,810	447,600
1997	442,717	583,352	5,556	588,908
1998	400,637	598,927	5,140	604,067
1999	452,058	606,030	5,747	611,777
U.S.				
1998	24,153,116	33,415,404	304,406	33,719,810
1999	25,961,173	36,521,667	324,934	36,846,601

1/Adjustments made for changes in inventory and for shipments.

2/Excludes custom slaughter for use on farms where produced and interfarm sales within Wyoming.

3/Receipts from marketings and sales of farm slaughter.

**MILK COWS AND PRODUCTION OF MILK AND MILKFAT:
WYOMING 1990-99, U.S. 1998-99**

Year	Farms with Milk Cows	Number of Milk Cows 1/	Production of Milk and Milkfat 2/				
			Per Milk Cow		Fat Percent in all Milk Produced	Total	
			Milk	Milkfat		Milk	Milkfat
	Number	1,000 Head	Pounds		Percent	Million Pounds	
1990	700	10.1	12,337	453	3.67	124.6	4.6
1991	600	8.7	12,563	465	3.70	109.3	4.0
1992	500	7.9	13,190	484	3.67	104.2	3.8
1993	500	7.3	13,658	508	3.72	99.7	3.7
1994	450	7.1	12,859	472	3.67	91.3	3.4
1995	400	6.6	13,197	486	3.68	87.1	3.2
1996	350	6.6	13,394	488	3.64	88.4	3.2
1997	350	6.6	12,697	461	3.63	83.8	3.0
1998	300	6.1	13,082	474	3.62	79.8	2.9
1999	300	6.0	13,300	483	3.63	79.8	2.9
U.S.							
1998	117,180	9,154	17,189	629	3.66	157,348	5,757.3
1999	111,220	9,156	17,771	652	3.67	162,711	5,975.7

1/Average number during year, excluding heifers not yet fresh.

2/Excludes milk sucked by calves.



**MILK USED AND MARKETING BY PRODUCERS:
WYOMING 1990-99, U.S. 1998-99**

Year	Milk Used Where Produced			Milk Marketed by Producers	
	Fed to Calves 1/	Used for Milk, Cream, and Butter	Total	Total Quantity 2/	Fluid Grade 3/
	Million Pounds			Million Pounds	Percent
1990	5.0	2.0	7.0	118.0	69
1991	4.0	1.0	5.0	104.0	76
1992	4.0	1.0	5.0	99.0	77
1993	3.0	1.0	4.0	95.7	80
1994	2.1	0.5	2.6	88.7	78
1995	3.8	0.6	4.4	82.7	80
1996	2.6	0.4	3.0	85.4	81
1997	1.4	0.2	1.6	82.2	81
1998	1.7	0.2	1.9	77.9	80
1999	1.4	0.2	1.6	78.2	80
U.S.					
1998	1,162	244	1,406	155,943	97
1999	1,134	233	1,367	161,343	97

1/Excludes milk sucked by calves.

2/Milk sold to plants and dealers as whole milk and equivalent amounts of milk for cream. Includes milk produced by dealers' own herds and small amounts sold directly to consumers. Also includes milk produced by institutional herds.

3/Percentage of milk sold that is eligible for fluid use (grade A for fluid use in most States). Includes fluid-grade milk used in manufacturing dairy products.

**MILK AND CREAM: MARKETINGS, INCOME AND VALUE,
WYOMING 1990-99, U.S. 1998-99**

Year	Milk Marketed	Average Returns		Cash Receipts from Marketings
		Per 100 Pounds of Milk	Per Pound of Milkfat	
	Million Pounds	Dollars		1,000 Dollars
1990	118.0	12.80	3.49	15,104
1991	104.0	11.40	3.08	11,856
1992	99.0	12.50	3.41	12,375
1993	95.7	12.40	3.33	11,867
1994	88.7	12.30	3.35	10,910
1995	82.7	11.10	3.02	9,180
1996	85.4	13.30	3.65	11,358
1997	82.2	12.20	3.36	10,028
1998	77.9	13.70	3.78	10,672
1999	78.2	13.00	3.58	10,166
<u>U.S.</u>				
1998	155,943	15.46	4.22	24,114,036
1999	161,343	14.38	3.92	23,203,993



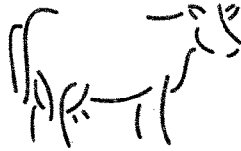
Year	Used for Milk, Cream, and Butter by Producers		Gross Producer Income 1/	Value of Milk Produced 2/
	Milk Utilized	Value		
	Million Pounds	1,000 Dollars	1,000 Dollars	
1990	2.0	205	15,309	15,949
1991	1.0	114	11,970	12,460
1992	1.0	125	12,500	13,025
1993	1.0	124	11,991	12,363
1994	0.5	61	10,971	11,230
1995	0.6	67	9,247	9,668
1996	0.4	53	11,411	11,757
1997	0.2	24	10,052	10,223
1998	0.2	27	10,699	10,933
1999	0.2	26	10,192	10,374
<u>U.S.</u>				
1998	244	37,842	24,151,878	24,331,981
1999	233	33,958	23,237,951	23,402,392

1/Cash receipts from marketings of milk and cream plus value of milk used for home consumption.
2/Includes value of milk fed to calves.

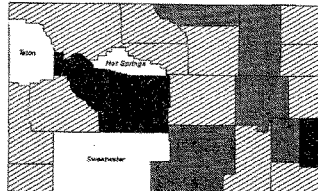
**ALL CATTLE AND CALVES ON WYOMING FARMS AND RANCHES,
By County, January 1, 1993-2000**

County and District	1993	1994	1995	1996	1997	1998	1999	2000
Number of Head								
Big Horn	45,000	45,000	48,000	55,000	52,000	52,000	53,000	52,000
Fremont	95,000	95,000	106,000	123,000	121,000	121,000	122,000	120,000
Hot Springs	25,000	30,000	25,000	21,000	25,000	32,000	30,000	29,000
Park	64,000	65,000	64,000	64,000	70,000	74,000	66,000	64,000
Washakie	30,000	35,000	36,000	37,000	42,000	41,000	39,000	40,000
NW District	259,000	270,000	280,000	300,000	310,000	320,000	310,000	305,000
Campbell	72,000	76,000	80,000	83,000	87,000	90,000	85,000	95,000
Crook	60,000	77,000	87,000	81,000	84,000	85,000	68,000	67,000
Johnson	55,000	67,000	60,000	62,000	72,000	76,000	67,000	65,000
Sheridan	120,000	115,000	113,000	123,000	114,000	105,000	89,000	103,000
Weston	43,000	45,000	40,000	44,000	48,000	54,000	51,000	50,000
NE District	350,000	380,000	380,000	390,000	405,000	410,000	360,000	380,000
Lincoln	48,000	56,000	55,000	52,000	53,000	50,000	48,000	47,000
Sublette	55,000	70,000	70,000	68,000	70,000	72,000	65,000	62,000
Teton	8,000	11,000	11,000	13,000	12,000	13,000	11,000	10,000
Uinta	45,000	43,000	44,000	47,000	50,000	55,000	46,000	46,000
West District	156,000	180,000	180,000	180,000	185,000	190,000	170,000	165,000
Albany	40,000	57,000	69,000	67,000	80,000	74,000	70,000	69,000
Carbon	100,000	106,000	103,000	90,000	108,000	114,000	110,000	100,000
Natrona	80,000	76,000	68,000	60,000	68,000	60,000	60,000	61,000
Sweetwater	20,000	21,000	20,000	23,000	24,000	22,000	20,000	20,000
SE District	240,000	260,000	260,000	240,000	280,000	270,000	260,000	250,000
Converse	60,000	65,000	58,000	60,000	66,000	70,000	77,000	85,000
Goshute	115,000	127,000	118,000	120,000	125,000	136,000	148,000	139,000
Laramie	55,000	68,000	65,000	65,000	66,000	73,000	73,000	75,000
Niobrara	45,000	55,000	51,000	60,000	60,000	75,000	67,000	72,000
Platte	70,000	75,000	78,000	75,000	83,000	116,000	95,000	109,000
SE District	345,000	390,000	370,000	380,000	400,000	470,000	460,000	480,000
STATE	1,350,000	1,480,000	1,470,000	1,490,000	1,580,000	1,660,000	1,560,000	1,580,000

43
L
I
V
E
S
T
O
C
K



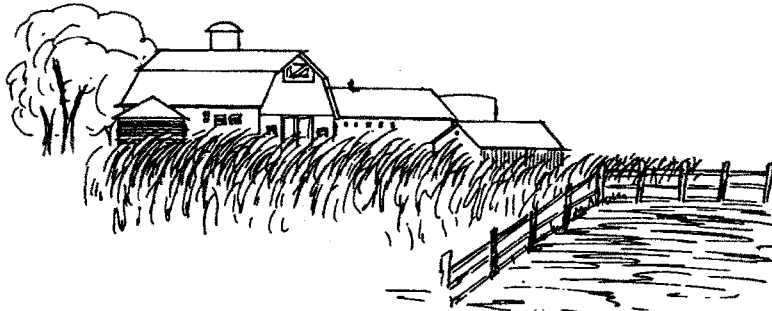
All Cattle - January 1, 2000



Number of Head	
□	Under 40,000
▒	40,000-79,000
■	80,000-119,000
■	120,000 & Over

**ALL COWS ON WYOMING FARMS AND RANCHES THAT HAVE CALVED,
BY COUNTY, JANUARY 1, 1993-2000**

County and District	1993	1994	1995	1996	1997	1998	1999	2000
Number of Head								
Big Horn	24,000	28,000	29,000	33,000	32,000	30,000	30,000	29,000
Fremont	50,000	56,000	60,000	66,000	71,000	69,000	69,000	67,000
Hot Springs	16,000	19,000	15,000	14,000	15,000	18,000	17,000	18,000
Park	29,000	30,000	29,000	29,000	32,000	34,000	30,000	33,000
Washakie	15,000	17,000	17,000	18,000	20,000	19,000	19,000	18,000
NW District	134,000	150,000	150,000	160,000	170,000	170,000	165,000	165,000
Campbell	42,000	44,000	45,000	51,000	55,000	57,000	50,000	53,000
Crook	39,000	45,000	48,000	46,000	51,000	49,000	43,000	41,000
Johnson	35,000	40,000	38,000	37,000	40,000	47,000	40,000	38,000
Sheridan	52,000	59,000	59,000	64,000	65,000	56,000	50,000	56,000
Weston	24,000	27,000	25,000	27,000	29,000	31,000	27,000	27,000
NE District	192,000	215,000	215,000	225,000	240,000	240,000	210,000	215,000
Lincoln	29,000	30,000	33,000	30,000	30,000	29,000	27,000	26,000
Sublette	36,000	39,000	36,000	40,000	44,000	40,000	40,000	38,000
Teton	6,000	6,000	7,000	7,000	6,000	8,000	7,000	7,000
Uinta	27,000	25,000	24,000	28,000	30,000	33,000	31,000	29,000
West District	98,000	100,000	100,000	105,000	110,000	110,000	105,000	100,000
Albany	28,000	30,000	37,000	35,000	35,000	38,000	32,000	33,000
Carbon	61,000	61,000	56,000	56,000	63,000	66,000	68,000	61,000
Natrona	40,000	42,000	35,000	36,000	38,000	38,000	38,000	39,000
Sweetwater	12,000	12,000	12,000	13,000	14,000	13,000	12,000	12,000
SC District	141,000	145,000	140,000	140,000	150,000	155,000	150,000	145,000
Converse	39,000	39,000	38,000	41,000	45,000	45,000	44,000	48,000
Goshen	36,000	43,000	40,000	38,000	46,000	41,000	41,000	37,000
Laramie	28,000	32,000	32,000	30,000	35,000	32,000	32,000	33,000
Niobrara	29,000	27,000	26,000	30,000	30,000	37,000	38,000	39,000
Platte	33,000	39,000	39,000	41,000	44,000	50,000	45,000	48,000
SE District	165,000	180,000	175,000	180,000	200,000	205,000	200,000	205,000

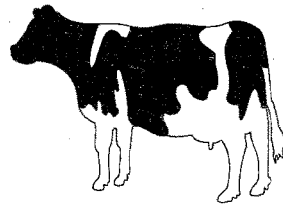


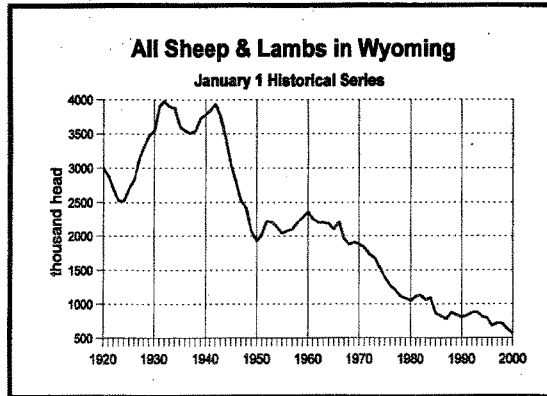
**MILK COWS ON WYOMING FARMS AND RANCHES THAT HAVE CALVED,
BY COUNTY, JANUARY 1, 1993-2000**

County and District	1993	1994	1995	1996	1997	1998	1999	2000
Number of Head								
Big Horn	200							
Fremont	700	600	400	200	300	200	200	200
Hot Springs								
Park	700	700	800	800	800	800	800	900
Washakie								
Other Cnty		300	400	400	500	300	400	200
NW District	1,600	1,600	1,600	1,400	1,600	1,300	1,400	1,300
Campbell								
Crook	100							
Johnson								
Sheridan	300	300	300	200	300	200	100	
Weston								
Other Cnty		100	200	100	200	100	200	300
NE District	400	400	500	300	500	300	300	300
Lincoln	3,400	3,400	3,300	3,000	3,100	2,800	2,700	2,800
Sublette								
Teton	100					100		
Uinta	100							
Other Cnty		300	300	200	300	200	300	300
West District	3,600	3,700	3,600	3,200	3,400	3,100	3,000	3,100
Albany								
Carbon								
Natrona								
Sweetwater								
Other Cnty	100	100	100	100	200	100	100	100
SC District	100	100	100	100	200	100	100	100
Converse					200	200	200	200
Goshute	100							
Laramie	200	200	200	200				
Niobrara								
Platte	700	700	700	600	700	600	600	600
Other Cnty		300	300	200	400	400	400	400
SB District	1,000	1,200	1,200	1,000	1,300	1,200	1,200	1,200
Other 1/	300							
	2,000	7,000	7,000	6,000	7,000	6,000	6,000	6,000

1/Total of counties having fewer than 100 head.

45
L
I
V
E
S
T
O
C
K





**SHEEP AND LAMBS: NUMBER OF OPERATIONS WITH SHEEP 1991-99,
AND NUMBER AND VALUE OF SHEEP,
WYOMING JANUARY 1, 1991-2000, U.S. JANUARY 1, 1999-2000**

Year	Operations with Sheep 1/	Sheep on January 1				
		All Sheep			Breeding Sheep and Lambs	Market Sheep and Lambs
		Number 2/	Value			
			Per Head	Total		
	Number	1,000 Head	Dollars	1,000 Dollars	1,000 Head	
1991	1,500	830	64.00	53,120	720	110
1992	1,500	870	58.00	50,460	720	150
1993	1,500	880	68.00	59,840	690	190
1994	1,200	813	68.00	55,284	620	193
1995	1,100	790	76.00	60,040	538	252
1996	1,100	680	90.00	61,200	560	120
1997	1,100	720	100.00	72,000	550	170
1998	1,100	710	105.00	74,550	530	180
1999	1,000	630	87.00	54,810	480	150
2000	3/	570	90.00	51,300	460	110
U.S.						
1999	66,800	7,215.0	88.00	637,794	5,299.0	1,916.0
2000	2/	7,026.0	95.00	668,130	5,163.0	1,863.0

1/Any operation have one or more head on hand at anytime during the year.

2/Includes new crop lambs (born Oct 1 - Jan 1) beginning in 1994. New crop lambs not allocated to breeding and market in 1994.

3/Published early the following year.

**SHEEP AND LAMBS: NUMBER ON FARMS AND RANCHES,
WYOMING JANUARY 1, 1991-2000, U.S. JANUARY 1, 1999-2000;
LAMB CROP, WYOMING 1991-99, U.S. 1999**

Year	All Sheep and Lambs 1/	Ewes 1 Year and Older	Rams	Replacement Lambs	Total Breeding Sheep and Lambs	Lamb Crop
1,000 Head						
1991	830	555	20	145	720	570
1992	870	570	23	127	720	580
1993	880	550	20	120	690	530
1994	813	510	20	90	620	510
1995	790	460	18	60	538	460
1996	680	455	15	90	560	460
1997	720	450	15	85	550	460
1998	710	430	14	86	530	440
1999	630	385	13	82	480	390
2000	570	365	13	82	460	
U.S.						
1999	7,215.0	4,322.0	203.3	773.7	5,299.0	4,719.0
2000	7,026.0	4,228.0	205.5	729.5	5,163.0	

Year	Total Market Sheep and Lambs	Market Lambs 2/				Total	Market Sheep
		under 65 pounds	65 - 84 pounds	85 - 105 pounds	over 105 pounds		
1,000 Head							
1991	110.0						
1992	150.0						
1993	190.0						
1994	193.0						
1995	252.0	10.0	25.0	100.0	114.0	249.0	3.0
1996	120.0	1.0	9.0	67.0	42.0	119.0	1.0
1997	170.0	2.0	20.0	102.0	43.0	167.0	3.0
1998	180.0	2.0	19.0	84.0	73.0	178.0	2.0
1999	150.0	2.0	19.0	80.0	47.0	148.0	2.0
2000	110.0	2.0	13.0	52.0	41.0	108.0	2.0
U.S.							
1999	1,916.0	490.4	328.1	513.0	502.0	1,833.5	82.5
2000	1,863.0	450.6	313.0	477.0	542.4	1,783.0	80.0

1/Includes new crop lambs (born Oct 1 - Jan 1) beginning in 1994. New crop lambs not allocated to breeding and market in 1994.
2/Lowest weight group was under 85 pounds prior to 1995.

**SHEEP SHORN: NUMBER, AVERAGE FLEECE WEIGHT,
WOOL PRODUCTION AND VALUE, WYOMING 1990-99, U.S. 1998-99**

Year	Sheep Shorn	Weight per Fleece	Shorn Wool Production	Price per Pound 1/	Total Value
	1,000 Head	Pounds	1,000 Pounds	Dollars	1,000 Dollars
1990	850	9.6	8,135	.89	7,240
1991	900	9.4	8,475	.61	5,170
1992	900	9.0	8,068	.86	6,938
1993	920	8.4	7,749	.54	4,184
1994	870	8.4	7,343	.84	6,168
1995	730	8.8	6,411	1.20	7,693
1996	640	9.1	5,811	.86	4,997
1997	650	8.8	5,690	.98	5,576
1998	650	8.5	5,540	.77	4,266
1999	570	8.6	4,930	.49	2,416
U.S.					
1998	6,428.0	7.7	49,255	.60	29,415
1999	6,150.0	7.6	46,549	.38	17,852

1/Weighted by sales.

**SHEEP AND LAMBS: INVENTORY, SUPPLY, AND DISPOSITION,
WYOMING 1990-99, U.S. 1998-99**

Year	Inventory Beginning of Year 1/	Lamb Crop	Inshipments	Marketings 2/	
				Sheep	Lambs
1,000 Head					
1990	805	550	117	152	413.0
1991	830	570	133	137	445.0
1992	870	580	159	183	458.0
1993	880	530	94	160	439.5
1994	813	510	64	129	370.5
1995	790	460	85	69	515.5
1996	680	460	78	82	344.5
1997	720	460	81	102	375.5
1998	710	440	67	123	401.0
1999	630	390	47	99	343.0
<u>U.S.</u>					
1998	7,825.1	5,007.0	1,744.0	991.7	5,505.1
1999	7,215.0	4,719.0	1,888.9	789.0	5,198.2

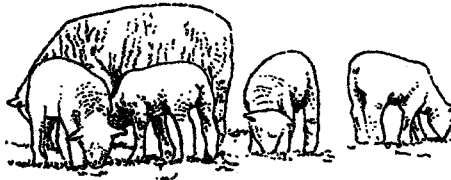
Year	Farm Slaughter 3/	Deaths		Inventory End of Year 1/
		Sheep	Lambs 4/	
1,000 Head				
1990	3.0	29	45	830
1991	3.0	30	48	870
1992	3.0	31	54	880
1993	2.5	32	60	813
1994	2.5	35	60	790
1995	2.5	25	43	680
1996	2.5	24	45	720
1997	2.5	24	47	710
1998	2.0	21	40	630
1999	2.0	18	35	570
<u>U.S.</u>				
1998	72.7	290.8	500.8	7,215.0
1999	66.8	260.9	482.0	7,026.0

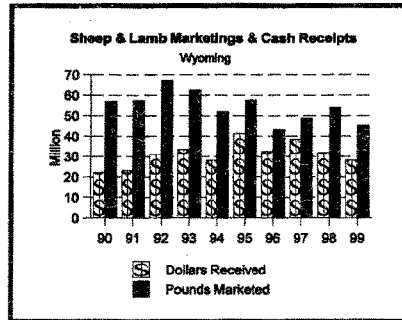
1/Includes new crop lambs (born Oct 1 - Jan 1) beginning in 1994.

2/Includes custom slaughter for use on farms where produced, but excludes interfarm sales within Wyoming.

3/Excludes custom slaughter for farms at commercial establishments.

4/Includes all lamb losses after docking.




 49
L
I
V
E
S
T
I
N
G

SHEEP AND LAMBS: PRODUCTION AND INCOME, WYOMING 1990-99, U.S. 1998-99

Year	Production 1/	Marketings 2/	Average Price per 100 Pounds	
			Sheep	Lambs
		1,000 Pounds	Dollars	
1990	50,473	56,873	17.80	50.00
1991	52,314	57,410	18.30	49.50
1992	54,451	67,167	24.50	58.40
1993	47,545	62,386	27.00	67.20
1994	42,537	51,808	28.40	66.70
1995	40,437	57,518	25.90	80.20
1996	41,378	43,160	29.40	90.20
1997	40,987	48,714	38.70	94.30
1998	39,695	53,883	28.70	71.80
1999	35,409	45,263	28.90	75.70
<u>U.S.</u>				
1998	554,918	744,838	30.60	72.30
1999	532,732	689,189	31.10	74.50

Year	Value of Production	Cash Receipts 3/	Value of Home Consumption	Gross Income
1,000 Dollars				
1990	20,051	22,074	185	22,259
1991	20,793	22,989	173	23,162
1992	26,925	31,037	217	31,254
1993	27,386	33,433	197	33,630
1994	25,522	28,034	197	28,231
1995	29,543	41,184	242	41,426
1996	31,708	32,349	262	32,611
1997	33,935	38,451	291	38,742
1998	24,493	31,690	168	31,858
1999	22,489	28,148	179	28,327
U.S.				
1998	354,437	484,515	8,518	493,033
1999	348,187	468,757	8,421	477,178

1/Adjustments made for changes in inventory and for shipments.

2/Excludes custom slaughter for use on farms where produced and interfarm sales within Wyoming.

3/Receipts from marketings and sales of farm slaughter.

50

L
I
V
I
N
G

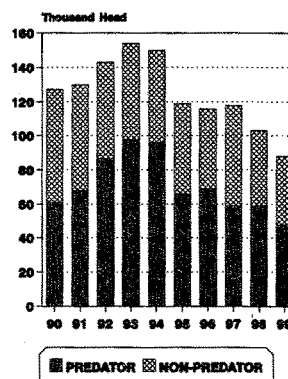
SHEEP LOSSES TO ALL CAUSES - 1999

Losses of sheep and lambs to predators, weather, diseases, and other causes has long been a significant risk to producers. In the past 10 years, an average of 11 percent of the lamb crop (before and after docking) in Wyoming has been lost to predators alone. When other causes are added in, this percentage increases to 18 percent. This annual report documents the magnitude and value of these losses. The report is now funded by the Wyoming Business Council, Agribusiness Division.

The source for the underlying data on which these statistics are based is our January survey of nearly all Wyoming sheep producers. The survey is used to estimate sheep and lamb inventories in the State on January 1, the previous year lamb crop, and losses by cause.

The 1999 report indicates that total sheep and lambs lost to predators was down 19 percent from the previous year due in part to a 10 percent drop in January 1 inventories and to an 11 percent drop in the annual lamb crop. When measured as a percentage of supply, lamb predator losses accounted for 10 percent of all lambs dropped, down from 11 percent in 1998. Non-predator losses were also lower thanks to mild weather. The value of sheep and lamb losses to all causes in 1999 is estimated at \$4.76 million.

ALL SHEEP & LAMB LOSSES
Predator, Non-Predator, and All Causes



Includes lamb deaths before docking

HIGHLIGHTS

PREDATOR LOSSES DOWN: Wyoming sheep producers lost 48,000 sheep and lambs to predators in 1999, down 19 percent from 1998. The 1999 lamb crop was 11 percent smaller than in 1998. Coyotes were the biggest predator taking 65 percent of the total predator losses and 35 percent of all losses.

ALL LAMB LOSSES DOWN 15 PERCENT: Sheep producers lost 70,000 lambs before or after docking in 1999, 15 percent less than in 1998. Losses to predators accounted for 60 percent of the total. Losses of lambs to weather related causes dropped 41 percent from the previous year but losses to diseases increased 46 percent.

SHEEP LOSSES DOWN 14 PERCENT: Sheep losses in Wyoming during 1999 totaled 18,000 head, down 3,000 head from 1998. Predator losses decreased by 1,000 head to 6,000 and non-predator losses dropped 2,000 head to 12,000.

VALUE OF LOSSES DOWN 14 PERCENT: Sheep producers in Wyoming lost an estimated \$4.76 million from sheep and lamb deaths in 1999, down 14 percent from the previous year. Predation accounted for \$2.43 million. Fewer total losses resulted in the lower total value.

LOSSES OF SHEEP AND LAMBS BY CAUSE: WYOMING 1994-99 1/

Cause of Loss	1994	1995	1996	1997	1998	1999
Number of Head						
Coyotes	69,000	48,000	49,000	41,000	39,500	31,000
Bobcats	500	300	400	500	600	500
Dogs	800	1,100	1,200	800	1,000	900
Bears	2,600	1,500	900	900	1,500	800
Eagles	11,100	7,800	8,500	7,000	8,400	7,400
Fox	9,000	5,600	6,800	6,300	5,400	4,700
Mountain Lions	2,000	1,100	1,800	2,100	1,900	2,000
Ravens 2/	—	—	—	—	—	200
Vultures 2/	—	—	—	—	—	200
Other Predators	900	600	400	400	700	300
Total Predators	96,000	66,000	69,000	59,000	59,000	48,000
Weather	11,900	23,700	17,100	30,000	15,400	8,600
Disease	16,100	8,200	9,000	12,300	10,300	14,000
Lambing Complications	9,400	6,900	8,500	6,200	6,700	6,100
Poison	5,200	3,500	3,100	3,300	3,500	3,900
Old Age	4,200	3,700	3,400	1,900	3,100	3,500
On Back	1,200	1,200	1,000	700	900	1,000
Theft	3,000	1,400	1,400	1,300	900	100
Other Known Causes	3,000	4,400	3,500	3,300	3,200	2,800
Total Loss From All Causes	150,000	119,000	116,000	118,000	103,000	88,000
Percent of Total by Cause						
Coyotes	46.0	40.3	42.2	34.7	38.3	35.2
Bobcats	0.4	0.3	0.3	0.4	0.6	0.6
Dogs	0.5	0.9	1.0	0.7	1.0	1.0
Bears	1.7	1.3	0.8	0.8	1.5	0.9
Eagles	7.4	6.6	7.3	5.9	8.2	8.4
Fox	6.0	4.7	5.9	5.3	5.2	5.3
Mountain Lions	1.3	0.9	1.6	1.8	1.8	2.3
Raven 2/	—	—	—	—	—	0.2
Vultures 2/	—	—	—	—	—	0.2
Other Predators	0.6	0.5	0.3	0.3	0.7	0.5
Total Predators	64.0	55.5	59.5	50.0	57.3	54.5
Weather	7.9	19.9	14.7	25.4	14.9	9.8
Disease	10.7	6.9	7.8	10.4	10.0	15.9
Lambing Complications	6.3	5.8	7.3	5.3	6.5	6.9
Poison	3.5	2.9	2.7	2.8	3.4	4.4
Old Age	2.8	3.1	2.9	1.6	3.0	4.0
On Back	0.8	1.0	0.9	0.6	0.9	1.1
Theft	2.0	1.2	1.2	1.1	0.9	0.1
Other Known Causes	2.0	3.7	3.0	2.8	3.1	3.2
Total Loss From All Causes	100.0	100.0	100.0	100.0	100.0	100.0
Dollar Value of Losses by Cause						
Coyotes	3,087,800	2,556,000	2,916,200	2,496,200	1,969,450	1,577,800
Bobcats	29,700	17,520	25,430	32,690	25,860	22,700
Dogs	43,400	68,360	83,870	49,670	59,120	57,900
Bears	132,500	90,690	60,060	59,720	96,690	49,100
Eagles	472,500	387,540	478,800	400,590	388,740	353,000
Fox	362,800	272,450	371,670	360,970	232,740	217,640
Mountain Lions	94,200	62,180	116,330	132,030	108,590	120,620
Ravens 2/	—	—	—	—	—	9,080
Vultures 2/	—	—	—	—	—	9,080
Other Predators	44,600	28,860	21,640	27,030	35,510	17,880
Total Predators	4,267,500	3,483,600	4,074,000	3,588,900	2,916,700	2,434,800
Weather	570,100	1,195,590	1,038,810	2,224,800	786,560	428,780
Disease	732,400	437,680	566,490	744,470	540,050	703,760
Lambing Complications	438,700	396,780	543,230	407,990	395,570	357,880
Poison	276,400	245,600	232,140	243,850	257,650	258,000
Old Age	287,700	292,300	312,800	190,950	299,150	308,000
On Back	76,500	91,710	88,210	61,570	81,510	88,000
Theft	191,300	98,240	106,060	95,530	60,150	8,800
Other Known Causes	157,100	254,900	223,460	204,340	223,360	173,980
Total Loss From All Causes	6,997,500	6,496,400	7,185,200	7,732,480	5,560,780	4,762,000

1/Includes all lamb losses from birth both before and after docking.

2/Included in "other predators" prior to 1999.

52

L
i
v
e
s
t
i
c
k

LOSSES OF SHEEP BY CAUSE: WYOMING 1994-99 1/

Cause of Loss	1994	1995	1996	1997	1998	1999
Number of Head						
Coyotes	11,500	8,000	7,000	4,000	5,000	4,000
Bobcats	200	100	100	100	—	—
Dogs	400	500	500	100	300	400
Bears	1,000	600	300	200	600	300
Eagles	1,000	400	500	100	500	400
Fox	100	100	100	100	—	100
Mountain Lions	500	300	500	300	500	700
Other Predators	300	—	—	100	100	100
Total Predators	15,000	10,800	9,000	5,000	7,000	6,000
Weather	3,300	1,800	3,000	12,000	2,300	900
Disease	3,100	1,400	2,100	1,100	1,800	1,600
Lambing Complications	2,200	2,100	2,200	1,300	2,000	1,900
Poison	2,400	2,500	1,700	1,300	2,000	1,900
Old Age	4,200	3,700	3,400	1,900	3,100	3,500
On Back	1,000	1,100	900	500	800	1,000
Theft	2,500	1,000	800	500	400	100
Other Known Causes	1,300	1,400	900	400	1,600	1,100
Total Loss From All Causes	35,000	25,000	24,000	24,000	21,000	18,000
Percent of Total by Cause						
Coyotes	32.9	32.0	29.2	16.7	23.8	22.2
Bobcats	0.6	0.4	0.4	0.4	—	—
Dogs	1.1	2.0	2.1	0.4	1.4	2.2
Bears	2.9	2.4	1.3	0.8	2.9	1.7
Eagles	2.9	1.6	2.1	0.4	2.4	2.2
Fox	0.3	0.4	0.4	0.4	—	0.6
Mountain Lions	1.4	1.2	2.1	1.3	2.4	3.9
Other Predators	0.9	—	—	0.4	0.5	0.6
Total Predators	42.9	40.0	37.5	20.8	33.3	33.3
Weather	9.4	7.2	12.5	50.0	11.0	5.0
Disease	8.9	5.6	8.8	4.6	8.6	8.9
Lambing Complications	6.3	8.4	9.2	5.4	9.5	10.6
Poison	6.9	10.0	7.1	5.4	9.5	10.6
Old Age	12.0	14.8	14.2	7.9	14.8	19.4
On Back	2.9	4.4	3.8	2.1	3.8	5.6
Theft	7.1	4.0	3.3	2.1	1.9	0.6
Other Known Causes	3.7	5.6	3.8	1.7	7.6	6.1
Total Loss From All Causes	100.0	100.0	100.0	100.0	100.0	100.0
Dollar Value of Losses by Cause 1/						
Coyotes	787,800	632,000	644,000	402,000	482,500	352,000
Bobcats	13,700	7,900	9,200	10,050	—	—
Dogs	27,400	39,500	46,000	10,050	28,950	35,200
Bears	68,500	47,400	27,600	20,100	57,900	26,400
Eagles	68,500	31,600	46,000	10,050	48,250	35,200
Fox	6,800	7,900	9,200	10,050	—	8,800
Mountain Lions	34,200	23,700	46,000	30,150	48,250	61,600
Other Predators	20,600	—	—	10,050	9,650	8,800
Total Predators	1,027,500	790,000	828,000	502,500	675,500	528,000
Weather	226,100	142,200	276,000	1,206,000	221,950	79,200
Disease	212,400	110,600	193,200	110,550	173,700	140,800
Lambing Complications	150,700	165,900	202,400	130,650	193,000	167,200
Poison	164,400	197,500	156,400	130,650	193,000	167,200
Old Age	287,700	292,300	312,800	190,950	299,150	308,000
On Back	68,500	86,900	82,800	50,250	77,200	88,000
Theft	171,300	79,000	73,600	50,250	38,600	8,800
Other Known Causes	89,100	110,600	82,800	40,200	154,400	96,800
Total Loss From All Causes	2,397,500	1,975,000	2,208,000	2,412,000	2,026,500	1,584,000

1/Sheep value per head based on a two-year average value per head of ewes 1+ years.

Sheep value: 1994-\$68.50; 1995-\$79.00; 1996-\$92.00; 1997-\$100.50; 1998-\$96.50; 1999-\$88.00.

LOSSES OF LAMBS BY CAUSE: WYOMING 1994-99 1/

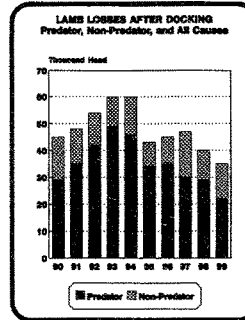
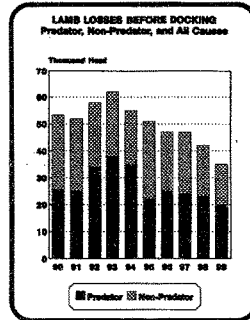
Cause of Loss	1994	1995	1996	1997	1998	1999
	Number of Head					
Coyotes	57,500	40,000	42,000	37,000	34,500	27,000
Bobcats	400	200	300	400	600	500
Dogs	400	600	700	700	700	500
Bears	1,600	900	600	700	900	500
Eagles	10,100	7,400	8,000	6,900	7,900	7,000
Fox	8,900	5,500	6,700	6,200	5,400	4,500
Mountain Lions	1,500	800	1,300	1,800	1,400	1,300
Ravens 2/	—	—	—	—	—	200
Vultures 2/	—	—	—	—	—	200
Other Predators	600	600	400	300	600	200
Total Predators	81,000	56,000	60,000	54,000	52,000	42,000
Weather	8,600	21,900	14,100	18,000	13,100	7,700
Disease	13,000	6,800	6,900	11,200	8,500	12,400
Lambing Complications	7,200	4,800	6,300	4,900	4,700	4,200
Poison	2,800	1,000	1,400	2,000	1,500	2,000
On Back	200	100	100	200	100	—
Theft	500	400	600	800	500	—
Other Known Causes	1,700	3,000	2,600	2,900	1,600	1,700
Total Loss From All Causes	115,000	94,000	92,800	94,000	82,000	70,000
	Percent of Total by Cause					
Coyotes	50.0	42.6	45.7	39.4	42.1	38.6
Bobcats	0.3	0.2	0.3	0.4	0.7	0.7
Dogs	0.3	0.6	0.8	0.7	0.9	0.7
Bears	1.4	1.0	0.7	0.7	1.1	0.7
Eagles	8.8	7.9	8.7	7.3	9.6	10.0
Fox	7.7	5.9	7.3	6.6	6.6	6.6
Mountain Lions	1.3	0.9	1.4	1.9	1.7	1.9
Ravens 2/	—	—	—	—	—	0.3
Vultures 2/	—	—	—	—	—	0.3
Other Predators	0.5	0.6	0.4	0.3	0.7	0.3
Total Predators	70.4	59.6	65.2	57.4	63.4	60.0
Weather	7.5	23.3	15.3	19.1	16.0	11.0
Disease	11.3	7.2	7.5	11.9	10.4	17.7
Lambing Complications	6.3	5.1	6.8	5.2	5.7	6.0
Poison	2.4	1.1	1.5	2.1	1.8	2.9
On Back	0.2	0.1	0.1	0.2	0.1	—
Theft	0.4	0.4	0.7	0.9	0.6	—
Other Known Causes	1.5	3.2	2.8	3.1	2.0	2.4
Total Loss From All Causes	100.0	100.0	100.0	100.0	100.0	100.0
	Dollar Value of Losses by Cause 3/					
Coyotes	2,300,000	1,924,000	2,272,200	2,094,200	1,486,950	1,225,800
Bobcats	16,000	9,620	16,230	22,640	25,860	22,700
Dogs	16,000	28,860	37,870	39,620	30,170	22,700
Bears	64,000	43,290	32,460	39,620	38,790	22,700
Eagles	404,000	355,940	432,800	390,540	340,490	317,800
Fox	356,000	264,550	362,470	350,920	232,740	208,840
Mountain Lions	60,000	38,480	70,330	101,880	60,340	59,020
Ravens 2/	—	—	—	—	—	9,080
Vultures 2/	—	—	—	—	—	9,080
Other Predators	24,000	28,860	21,640	16,980	25,860	9,080
Total Predators	3,240,000	2,693,600	3,246,000	3,056,400	2,241,200	1,906,800
Weather	344,000	1,053,390	762,810	1,018,800	564,610	349,580
Disease	520,000	327,080	373,290	633,920	366,350	562,960
Lambing Complications	288,000	230,880	340,830	277,340	202,570	190,680
Poison	112,000	48,100	75,740	113,200	64,650	90,800
On Back	8,000	4,810	5,410	11,320	4,310	—
Theft	20,000	19,240	32,460	45,280	21,550	—
Other Known Causes	68,000	144,300	140,660	164,140	68,960	77,180
Total Loss From All Causes	4,600,000	4,521,400	4,977,200	5,320,400	3,534,200	3,178,000

1/Includes all lamb losses both before and after docking.

2/Included in "other predators" prior to 1999.

3/Lamb value per head based on the annual hundredweight prices received by farmers and ranchers for a 60 pound lamb.

Lamb value: 1994-\$40.00; 1995-\$48.10; 1996-\$54.10; 1997-\$56.60; 1998-\$43.10; 1999-\$45.40.



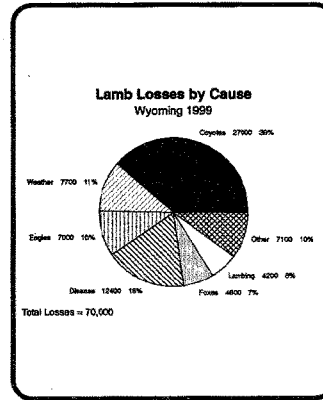
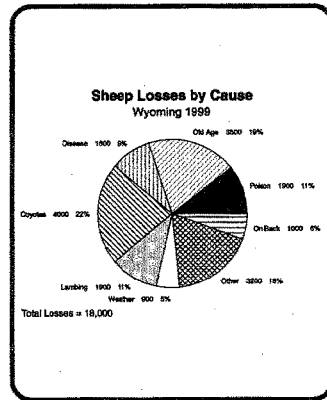
LOSSES OF LAMBS BEFORE DOCKING: WYOMING 1994-99

Cause of Loss	1994	1995	1996	1997	1998	1999
Number of Head						
Coyotes	20,000	13,000	14,000	13,000	12,000	10,000
Bobcats	200	100	100	300	400	500
Dogs	200	200	300	300	200	100
Bears	200	100	—	100	—	—
Eagles	7,200	4,400	5,400	4,700	5,500	4,800
Fox	6,500	3,600	4,700	5,200	4,100	3,600
Mountain Lions	400	100	200	200	300	400
Ravens 1/	—	—	—	—	—	200
Vultures 1/	—	—	—	—	—	200
Other Predators	300	500	300	200	500	200
Total Predators	35,000	22,000	25,000	24,000	23,000	20,000
Weather	7,100	21,000	12,000	13,200	9,300	6,200
Disease	5,000	1,800	2,800	3,400	4,000	4,000
Lambing Complications	7,200	4,800	6,300	4,900	4,700	4,500
Poison	200	400	100	500	100	200
On Back	—	—	—	—	—	—
Theft	—	—	300	—	300	—
Other Known Causes	500	1,000	500	1,000	600	400
Total Loss From All Causes	55,000	51,000	47,000	47,000	42,000	35,000

1/ Included in "other predators" prior to 1999.

LOSSES OF LAMBS AFTER DOCKING: WYOMING 1994-99

Cause of Loss	1994	1995	1996	1997	1998	1999
Number of Head						
Coyotes	37,500	27,000	28,000	24,000	22,500	17,000
Bobcats	200	100	200	100	200	—
Dogs	200	400	400	400	500	400
Bears	1,400	800	600	600	900	500
Eagles	2,900	3,000	2,600	2,200	2,400	2,200
Fox	2,400	1,900	2,000	1,000	1,300	1,000
Mountain Lions	1,100	700	1,100	1,600	1,100	900
Other Predators	300	100	100	100	100	—
Total Predators	46,000	34,000	35,000	30,000	29,000	22,000
Weather	1,500	900	2,100	4,800	3,800	1,500
Disease	4,000	5,000	4,100	7,800	4,500	8,400
Poison	2,600	600	1,500	1,500	1,400	1,800
On Back	200	100	100	200	100	—
Theft	500	400	300	800	200	—
Other Known Causes	1,200	2,000	2,100	1,900	1,000	1,300
Total Loss From All Causes	60,000	43,000	45,000	47,000	40,000	35,000



55
L
I
V
E
S
T
O
C
K

LOSSES OF SHEEP AND LAMBS: PERCENT BY CAUSE
WITHIN EACH AGRICULTURAL STATISTICS DISTRICT, WYOMING 1999 1/

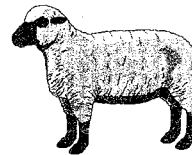
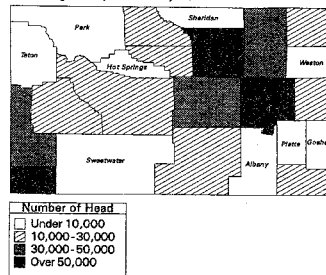
Cause of Loss	Northwest	Northeast	West	South Central	Southeast	State
Percent						
Coyotes	21.9	40.7	26.0	45.4	35.8	35.2
Bobcats	—	1.0	—	—	1.0	0.6
Dogs	1.9	0.3	4.0	—	0.5	1.0
Bears	0.6	0.3	4.0	1.5	—	0.9
Eagles	1.9	10.0	3.0	15.4	9.4	8.4
Fox	1.9	5.7	9.0	2.3	7.9	5.3
Mountain Lions	3.1	1.7	—	4.6	2.1	2.3
Ravens	—	—	2.0	—	—	0.2
Vultures	—	—	—	—	1.1	0.2
Other Predators	—	0.3	2.0	—	—	0.4
Total Predators	31.3	60.0	50.0	69.2	57.8	54.5
Weather	7.5	11.0	18.0	6.2	7.9	9.8
Disease	45.0	7.7	12.0	6.2	13.2	15.9
Lambing Complications	6.3	6.0	8.0	4.6	10.0	6.9
Poison	2.5	5.7	6.0	3.1	4.2	4.4
Old Age	3.1	5.3	1.0	5.4	3.2	4.0
On Back	1.8	1.0	—	1.5	1.1	1.2
Theft	—	—	1.0	—	—	0.1
All Other Causes	2.5	3.3	4.0	3.8	2.6	3.2
Total Loss All Causes	100.0	100.0	100.0	100.0	100.0	100.0

1/Includes all lamb losses both before and after docking.

**BREEDING SHEEP ON WYOMING FARMS AND RANCHES, BY COUNTY,
JANUARY 1, 1993-2000**

County and District	1993	1994	1995	1996	1997	1998	1999	2000
Number of Head								
Big Horn	33,000	25,000	20,000	19,000	19,000	22,000	17,000	16,000
Fremont	30,000	23,000	19,000	18,000	17,000	17,000	13,000	14,000
Hot Springs	7,000	5,000	3,000	4,000	3,000	2,000	2,000	2,000
Park	12,000	9,000	8,000	9,000	8,000	8,000	7,000	6,000
Washakie	28,000	18,000	16,000	20,000	23,000	26,000	16,000	14,000
NW District	110,000	80,000	66,000	70,000	70,000	75,000	55,000	52,000
Campbell	47,000	45,000	40,000	43,000	41,000	51,000	52,000	46,000
Crook	32,000	27,000	32,000	39,000	34,000	27,000	20,000	20,000
Johanson	104,000	95,000	85,000	85,000	82,000	74,000	69,000	52,000
Sheridan	14,000	12,000	10,000	11,000	11,000	8,000	7,000	7,000
Weston	13,000	11,000	8,000	7,000	7,000	5,000	3,000	3,000
NE District	210,000	190,000	175,000	185,000	175,000	165,000	151,000	128,000
Lincoln	33,000	32,000	37,000	39,000	32,000	30,000	32,000	35,000
Sublette	10,000	15,000	11,000	7,000	14,000	14,000	15,000	19,000
Teton	2,000	2,000	1,000	1,000		1,000	1,000	1,000
Uinta	50,000	41,000	38,000	43,000	47,000	45,000	47,000	55,000
West District	95,000	90,000	87,000	90,000	93,000	90,000	95,000	110,000
Albany	9,000	6,000	6,000	5,000	5,000	7,000	6,000	6,000
Carbon	38,000	34,000	32,000	33,000	33,000	34,000	29,000	24,000
Natrona	73,000	81,000	67,000	56,000	55,000	54,000	44,000	41,000
Sweetwater	25,000	19,000	15,000	16,000	12,000	10,000	9,000	9,000
SC District	145,000	140,000	120,000	110,000	105,000	105,000	88,000	80,000
Converse	86,000	71,000	59,000	73,000	72,000	63,000	61,000	61,000
Goshen	3,000	2,000	2,000	2,000	2,000	4,000	4,000	4,000
Laramie	18,000	25,000	14,000	13,000	16,000	12,000	12,000	12,000
Niobrara	20,000	20,000	14,000	16,000	16,000	14,000	13,000	12,000
Platte	3,000	2,000	1,000	1,000	1,000	2,000	1,000	1,000
SE District	130,000	120,000	90,000	105,000	107,000	95,000	91,000	90,000
STATE	690,000	620,000	536,000	560,000	550,000	550,000	480,000	460,000

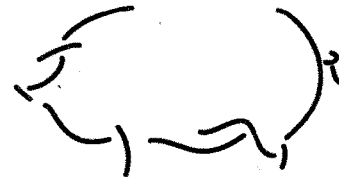
Breeding Sheep - January 1, 2000



**HOGS AND PIGS: NUMBER OF OPERATIONS WITH HOGS,
AND NUMBER AND VALUE OF HOGS,
WYOMING DECEMBER 1, 1990-99, U.S. DECEMBER 1, 1998-99**

Year	Operations with Hogs 1/	Hogs on December 1				
		Kept for Breeding	Market Hogs	Total Hogs	Value	
					Per Head	Total
	Number		1,000 Head		Dollars	1,000 Dollars
1990	400	2	18	20	86.00	1,720
1991	400	3	21	24	77.00	1,848
1992	500	5	30	35	87.00	3,045
1993	500	5	31	36	91.00	3,276
1994	400	6	45	51	64.00	3,264
1995	350	9	64	73	84.00	6,132
1996	350	13	69	82	110.00	9,020
1997	300	19	76	95	97.00	9,215
1998	300	20	120	140	53.00	7,420
1999	200	18	87	105	86.00	9,030
U.S.						
1998	113,830	6,682	55,523	62,206	44.00	2,765,847
1999	98,460	6,244	53,264	59,507	72.00	4,269,090

1/Any operation having one or more head on hand at anytime during the year.



**FIG CROP: SOWS FARROWED AND FIG CROP,
WYOMING 1990-99, U.S. 1998-99**

Year	Pig Crop December—November 1/		
	Sows Farrowed	Pigs per Litter	Pig Crop
	1,000 Head	Head	1,000 Head
1990	4.0	8.0	32.0
1991	5.4	7.9	42.4
1992	7.3	9.1	56.5
1993	8.0	8.8	70.0
1994	10.0	8.8	88.0
1995	13.6	9.0	123.0
1996	17.1	8.8	150.0
1997	28.0	8.7	243.0
1998	35.5	8.6	306.0
1999	29.0	8.6	249.0
U.S.			
1998	12,061	8.7	105,005
1999	11,666	8.8	102,569

1/December preceding year.

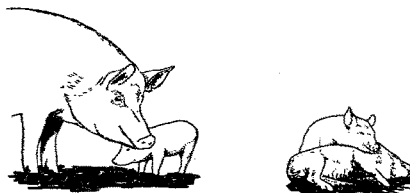
58

L
i
v
e
s
t
i
c
k

**HOGS AND PIGS: INVENTORY, SUPPLY, AND DISPOSITION,
WYOMING 1990-99, U.S. 1998-99**

Year	Inventory December 1, Previous Year	Annual Pig Crop	Inshipments	Marketings 1/	Farm Slaughter 2/	Deaths	Inventory End of Year
1,000 Head							
1990	16	32.0	2.0	27.5	0.5	2	20
1991	20	42.4	3.0	35.4	2.0	4	24
1992	24	66.5	3.0	50	3.5	5	35
1993	35	70.0	3.0	66	2.0	4	36
1994	36	88.0	4.0	69.5	2.5	5	51
1995	51	123.0	5.0	98	2.0	6	73
1996	73	150.0	10.0	140.5	2.5	8	82
1997	82	243.0	26.7	244.2	2.5	10	95
1998	95	306.0	2.5	249	2.5	12	140
1999	140	249.0	1.0	274	2.0	9	105
U.S.							
1998	61,157.7	105,004.9	19,370.8	117,239.8	163.1	5,924.8	62,205.6
1999	62,205.6	102,569.4	22,635.0	121,186.6	141.0	6,575.0	59,507.4

1/Includes custom slaughter for use on farms where produced but excludes interfarm sales within Wyoming.
2/Excludes custom slaughter for farmers at commercial establishments.



HOGS AND PIGS: PRODUCTION AND INCOME, WYOMING 1990-99, U.S. 1998-99

Year	Production 1/	Marketings 2/	Average Price per 100 Pounds	Value of Production	Cash Receipts 3/	Value of Consumption	Gross Income
1,000 Pounds			Dollars	1,000 Dollars			
1990	7,547	7,043	53.20	3,979	3,747	69	3,816
1991	10,438	9,238	47.40	4,856	4,379	370	4,749
1992	15,156	12,503	38.90	5,730	4,864	694	5,558
1993	17,657	17,145	43.50	7,421	7,458	499	7,957
1994	19,394	17,085	37.20	6,847	6,356	476	6,832
1995	25,899	24,225	40.40	9,986	9,787	517	10,304
1996	35,183	34,625	50.10	16,632	17,347	561	17,908
1997	53,728	58,128	50.60	24,474	29,413	546	29,959
1998	66,978	61,750	31.10	20,717	19,204	345	19,549
1999	65,006	67,875	27.30	17,720	18,530	307	18,837
U.S.							
1998	25,714,706	26,477,537	34.40	8,673,713	9,444,082	34,374	9,478,456
1999	25,600,424	27,033,498	30.30	7,660,399	8,623,125	28,381	8,651,506

1/Adjustments made for changes in inventory and for inshipments.
2/Excludes custom slaughter for use on farms where produced and interfarm sales within Wyoming.
3/Receipts from marketings and sales of farm slaughter.

CHICKENS: NUMBER AND VALUE, WYOMING DECEMBER 1, 1995-99, U.S. 1998-99

CHICKENS: NUMBER AND VALUE, WYOMING DECEMBER 1, 1995-1999							
Year	Layers 20 Weeks Old and Older	Pullets 13-20 Weeks Old	Pullets Under 13 Weeks of Age	Other Chickens	Number	Total Chickens 1/	
						Average	Value
						1,000 Dollars	
1995	15	2	2	1	20	2.10	42
1996	12	2	2	1	17	2.10	36
1997	12	2	2	1	17	2.10	36
1998	12	2	2	1	17	2.10	36
1999	12	2	2	1	17	2.00	34
U.S.							
1998	321,718	39,664	55,981	7,682	425,045	2.69	1,143,835
1999	329,305	38,587	58,775	9,659	436,326	2.65	1,154,840

1/Excludes commercial broilers.

**LAYERS AND EGG PRODUCTION: NUMBER OF LAYERS, EGGS PER LAYER,
EGG PRODUCTION, AND VALUE OF EGG PRODUCTION,
WYOMING 1995-99, U.S. 1998-99 1/**

WYOMING 1995-99, U.S. 1998-99				
Year	Average Number Layers	Eggs per Layer	Total Egg Production	Value of Egg Production
	1,000 Head	Number	Million Eggs	1,000 Dollars
1995	15	160	2.4	148
1996	15	160	2.4	150
1997	12	252	3.5	184
1998	12	300	3.6	171
1999	12	300	3.6	141
U.S.				
1998	312,035	255	79,754	4,439,446
1999	322,322	257	82,711	4,322,589

1/Covers period Dec 1 previous year through Nov 30.

**BEEES AND HONEY: NUMBER OF COLONIES, PRODUCTION, VALUE, AND STOCKS,
WYOMING 1995-99, U.S. 1998-99**

Year	Colonies of Bees	Production		Value		Stocks Dec 15 1/
		Per Colony	Total	Per Pound	Total	
	1,000 Colonies	Pounds	1,000 Pounds	Cents	1,000 Dollars	1,000 Pounds
1995	38	36	1,368	73.0	999	150
1996	40	73	2,920	90.0	2,628	526
1997	38	62	2,356	75.0	1,767	660
1998	46	60	2,760	68.0	1,877	524
1999	37	72	2,664	61.0	1,625	746
U.S.						
1998	2,633	83.7	220,316	65.5	147,254	80,808
1999	2,688	76.3	205,228	59.9	125,422	79,361

1/Stocks held by producers.

**RED MEAT PRODUCTION: TOTAL PRODUCTION AND NUMBER OF HEAD SLAUGHTERED,
WYOMING 1995-99, U.S. 1998-99**

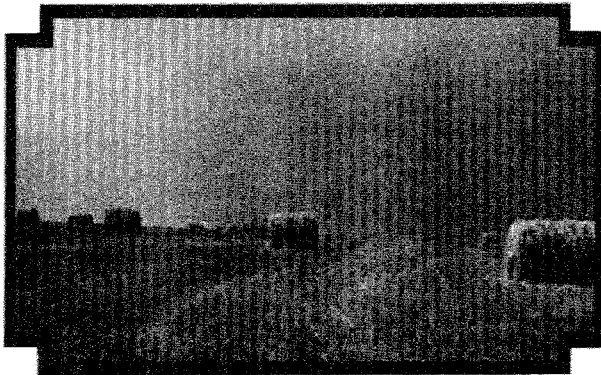
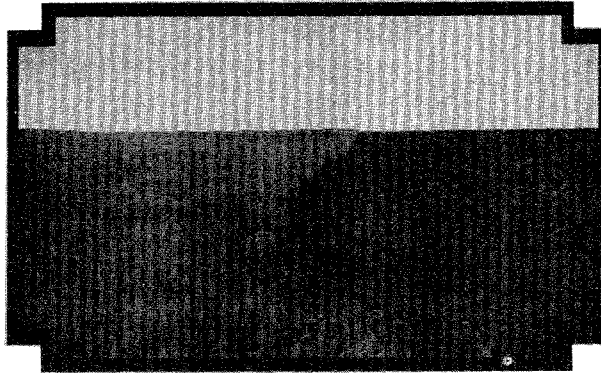
Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	Total 1/
RED MEAT PRODUCTION - 1,000 Pounds 2/													
1995	478	372	400	330	384	405	363	829	591	329	544	539	5,562
1996	500	400	300	400	400	300	400	700	600	400	500	600	5,500
1997	500	400	300	300	300	300	400	600	500	300	400	600	5,000
1998	500	400	400	300	300	400	400	700	600	300	500	700	5,400
1999	600	500	400	300	300	400	400	700	500	300	600	500	5,600
U.S.	Million Pounds												
1998	3,836	3,476	3,726	3,701	3,580	3,732	3,781	3,770	3,828	4,035	3,725	3,944	45,133
1999	3,833	3,537	4,017	3,822	3,603	3,940	3,781	3,910	3,933	4,001	3,892	3,862	46,130
NUMBER OF CATTLE SLAUGHTERED - Head													
1995	500	400	400	400	400	500	400	800	700	400	700	700	6,300
1996	600	500	400	400	500	500	500	800	700	500	700	800	7,000
1997	700	500	400	400	500	400	500	700	600	400	600	800	6,400
1998	600	500	500	400	400	500	400	700	700	300	600	800	6,400
1999	700	500	500	400	400	500	500	700	600	300	700	700	6,400
U.S.	1,000 Head												
1998	3,039	2,747	2,895	2,927	2,957	3,108	3,039	3,040	2,991	3,055	2,773	2,895	35,465
1999	2,961	2,723	3,050	2,971	2,997	3,207	3,083	3,150	3,099	3,094	2,940	2,875	36,150
NUMBER OF CALVES SLAUGHTERED 3/													
U.S.	1,000 Head												
1998	128	113	127	109	102	117	134	125	135	125	112	130	1,458
1999	105	100	117	97	89	105	111	118	120	105	103	112	1,282
NUMBER OF SHEEP AND LAMBS SLAUGHTERED - Head													
1995	100	100	100	100	100	100	200	400	200	100	100	200	1,800
1996	100	100	100	100	100	100	100	300	200	100	100	100	1,400
1997	100	100	100	100	100	100	100	200	200	100	100	100	1,300
1998	100	100	100	100	100	100	100	200	200	100	100	100	1,400
1999	100	100	100	—	100	100	100	300	200	100	100	100	1,500
U.S.	1,000 Head												
1998	310	309	386	384	281	295	281	276	307	323	298	355	3,804
1999	269	300	424	309	270	270	265	295	308	305	330	356	3,701
NUMBER OF HOGS AND PIGS SLAUGHTERED - Head													
1995	600	500	600	400	500	400	400	1,200	700	300	600	400	6,600
1996	400	400	300	400	300	200	300	900	500	300	400	400	4,800
1997	300	400	200	300	300	300	400	900	500	300	400	400	4,600
1998	400	400	400	300	300	300	400	1,100	600	300	600	800	5,900
1999	900	700	600	400	300	400	400	1,200	700	300	500	500	6,900
U.S.	1,000 Head												
1998	8,589	7,712	8,475	8,328	7,571	7,730	8,270	8,169	8,600	9,352	8,809	9,425	101,029
1999	8,554	7,908	9,118	8,530	7,439	8,319	7,908	8,404	8,641	8,949	8,896	8,885	101,544

1/Totals may not add due to rounding.

2/Includes total beef, veal, pork, lamb and mutton, excluding farm slaughter.

3/Number of calves slaughtered in Wyoming not shown because of insignificant numbers.

CROPS



1999 CROP YEAR IN REVIEW

Cool, wet weather in **April and May** in 1999 was good for hay production and got other crops off to a good start. Precipitation continued in **June** before turning hot and dry in **July and August**. Winter wheat and barley harvests moved well ahead of average pace in **July and August**. Cooler weather with showers in early September slowed dry bean combining and a **mid-September** frost pushed a late-maturing corn crop. By **mid-October** bean harvest was wrapping up, sugarbeet harvest was ahead of average, but corn grain combining was lagging behind. Corn harvest caught up in late **October** and finished in **November**.

Average yields per acre in 1999 were higher than the previous year for winter wheat, barley, alfalfa hay, other hay, sugarbeets, and corn silage. Lower yields were seen for spring wheat, oats, dry beans, and corn grain. Alfalfa and other hay yields tied the record highs for the State.

WINTER WHEAT production in 1999 was off 5 percent from 1998 as a drop of 8 percent in harvested acreage more than offset a one bushel increase in average yield.

SPRING WHEAT acreage and average yield were both lower than the previous year resulting in a 26 percent drop in total production. It was the smallest crop since 1991.

BARLEY production in 1999 increased 2 percent from 1998 but was still 13 percent less than in 1997. Harvested acreage was unchanged from the previous year but the average yield per acre was 2 bushels higher.

OATS production in 1999 was up 15 percent thanks to a 23 percent increase in acreage harvested for grain. Production was still 19 percent below the 1997 crop.

CORN FOR GRAIN production fell by 19 percent from 1998 as acreage harvested was off 13 percent and average yields were 9 bushels lower than the 1998 record high average.

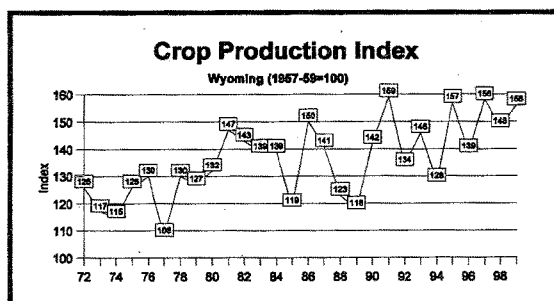
CORN FOR SILAGE production was off 4 percent from the previous year as a 9 percent drop in acres harvested for silage offset a one ton increase in average yield.

DRY BEAN output in 1999 was down 2 percent from 1998 but was still 13 percent above 1997. Acreage harvested increased 5 percent but average yield was down 160 pounds per acre.

SUGARBEET production recovered from 1998's low level, increasing 11 percent. Acreage harvested was up 7 percent and yield was up 4 percent.

ALFALFA HAY production in 1999 set a new record high at 1.78 million tons, up 14 percent from 1998. Acreage cut for alfalfa was a new record high and average yields tied the record. Production of all **OTHER HAY** also increased 14 percent as average yields also tied the record high. Other hay production was only 1 percent behind the 1991 record crop. **ALL HAY** production set a new record high in 1999 at 2.79 million tons.

ALFALFA SEED production in 1999 rose to 8.67 million pounds of seed from 14,700 acres according to the Wyoming Seed Certification Service.



**WHEAT: ACREAGE AND PRODUCTION,
WYOMING BY CROPPING PRACTICE 1990-99, U.S. 1998-99**

Year	Cropping Practice	Planted	Harvested	Yield per Harv. Acre	Production	Planted	Harvested	Yield per Harv. Acre	Production
		1,000 Acres	Bu.	1,000 Bu.		1,000 Acres	Bu.	1,000 Bu.	
		WINTER WHEAT				OTHER SPRING WHEAT			
1990	Irrigated	11.0	10.0	57.3	573.0	3.0	2.1	51.9	109.0
	Summerfallow	205.0	191.6	27.7	5,299.0	7.3	3.0	16.3	49.0
	Cont. Crop	4.0	3.4	21.5	73.0	1.7	0.9	11.1	10.0
	Total	220.0	205.0	29.0	5,945.0	12.0	6.0	28.0	168.0
1991	Irrigated	13.0	10.0	50.0	500.0	1.8	1.0	60.0	60.0
	Summerfallow	201.5	182.0	28.0	5,100.0	4.5	2.7	20.2	54.6
	Cont. Crop	10.5	8.0	25.0	200.0	0.7	0.3	18.0	5.4
	Total	225.0	200.0	29.0	5,800.0	7.0	4.0	30.0	120.0
1992	Irrigated	11.0	10.0	52.0	520.0	7.2	6.0	63.0	378.0
	Summerfallow	206.0	188.0	23.7	4,448.0	6.2	5.2	27.5	143.0
	Cont. Crop	3.0	2.0	16.0	32.0	3.6	2.8	23.9	67.0
	Total	220.0	200.0	25.0	5,000.0	17.0	14.0	42.0	588.0
1993	Irrigated	10.0	8.5	55.0	467.5	5.0	3.2	68.0	217.5
	Summerfallow	196.0	179.0	26.8	4,795.0	8.0	6.2	35.0	217.0
	Cont. Crop	14.0	12.5	27.0	337.5	5.0	3.6	31.0	111.5
	Total	220.0	200.0	28.0	5,600.0	18.0	13.0	42.0	546.0
1994	Irrigated	10.0	8.0	46.0	368.0	11.5	7.0	60.0	420.0
	Summerfallow	181.0	165.0	23.0	3,791.0	11.0	8.7	22.1	192.0
	Cont. Crop	9.0	7.0	23.0	161.0	7.5	4.3	20.5	88.0
	Total	200.0	180.0	24.0	4,320.0	30.0	20.0	35.0	700.0
1995	Irrigated	10.0	9.0	75.0	675.0	7.5	5.5	75.0	410.0
	Summerfallow	195.0	187.0	34.0	6,405.0	9.5	8.5	24.0	205.0
	Cont. Crop	5.0	4.0	30.0	120.0	8.0	6.0	24.0	145.0
	Total	210.0	200.0	36.0	7,200.0	25.0	20.0	38.0	760.0
1996	Irrigated	11.0	10.0	53.0	530.0	7.0	6.5	63.0	410.0
	Non-Irrigated	219.0	200.0	24.0	4,720.0	23.0	19.5	19.0	370.0
	Total	230.0	210.0	25.0	5,250.0	30.0	26.0	30.0	780.0
1997	Irrigated	14.0	13.0	73.0	949.0	6.0	5.5	59.0	325.0
	Non-Irrigated	226.0	212.0	28.0	6,026.0	14.0	11.5	25.0	287.0
	Total	240.0	225.0	31.0	6,975.0	20.0	17.0	36.0	612.0
1998	Irrigated	9.0	8.5	73.0	620.0	3.5	3.0	65.0	194.0
	Non-Irrigated	211.0	191.5	30.0	5,780.0	10.5	7.0	28.0	196.0
	Total	220.0	200.0	32.0	6,400.0	14.0	10.0	39.0	390.0
1999	Irrigated	12.0	10.0	70.0	700.0	2.0	1.8	62.0	112.0
	Non-Irrigated	188.0	175.0	31.0	5,405.0	8.0	6.2	28.0	176.0
	Total	200.0	185.0	33.0	6,105.0	10.0	8.0	36.0	288.0
U.S.									
1998	Total	46,449.0	40,126.0	46.9	1,880,733.0	15,567.0	15,148.0	34.9	528,469.0
1999	Total	43,431.0	35,572.0	47.8	1,699,989.0	15,348.0	14,768.0	34.1	503,132.0

**ALL WHEAT AND BARLEY: ACREAGE AND PRODUCTION,
WYOMING BY CROPPING PRACTICE 1990-99, U.S. 1998-99**

Year	Cropping Practice	Planted	Harvested	Yield per Harv. Acre	Production	Planted	Harvested	Yield per Harv. Acre	Production
		1,000 Acres		Bu.	1,000 Bu.	1,000 Acres		Bu.	1,000 Bu.
ALL WHEAT					BARLEY				
1990	Irrigated	14.0	12.1	56.4	682.0	112.5	109.5	79.8	8,737.0
	Summerfallow	212.3	194.6	27.5	5,348.0	9.4	8.4	31.7	266.0
	Cont. Crop	5.7	4.3	19.3	83.0	8.1	7.1	34.8	247.0
	Total	232.0	211.0	29.0	6,113.0	130.0	125.0	74.0	9,250.0
1991	Irrigated	14.8	11.0	50.9	560.0	123.0	120.0	84.0	10,080.0
	Summerfallow	206.0	184.7	27.9	5,154.6	10.0	8.6	31.0	266.5
	Cont. Crop	11.2	8.3	24.7	205.4	7.0	6.4	28.7	183.5
	Total	232.0	204.0	29.0	5,920.0	140.0	135.0	78.0	10,530.0
1992	Irrigated	18.2	16.0	56.1	898.0	113.0	110.0	86.6	9,525.0
	Summerfallow	212.2	193.2	23.8	4,591.0	8.0	7.0	35.0	245.0
	Cont. Crop	6.6	4.8	20.6	99.0	9.0	8.0	44.4	355.0
	Total	237.0	214.0	26.1	5,588.0	130.0	125.0	81.0	10,125.0
1993	Irrigated	15.0	11.7	58.5	685.0	105.5	98.0	91.5	8,968.0
	Summerfallow	204.0	185.2	27.1	5,012.0	7.5	6.0	33.3	200.0
	Cont. Crop	19.0	16.1	27.9	449.0	7.0	6.0	48.7	292.0
	Total	238.0	213.0	28.9	6,146.0	120.0	110.0	86.0	9,460.0
1994	Irrigated	21.5	15.0	52.5	788.0	88.0	81.0	82.6	6,688.0
	Summerfallow	192.0	173.7	22.9	3,965.0	15.5	14.0	53.0	742.0
	Cont. Crop	16.5	11.3	22.0	249.0	6.5	5.0	34.0	170.0
	Total	230.0	200.0	25.1	5,020.0	110.0	100.0	76.0	7,600.0
1995	Irrigated	17.5	14.5	75.0	1,085.0	87.5	84.0	96.0	8,064.0
	Summerfallow	204.5	195.5	34.0	6,610.0	5.5	4.5	30.0	135.0
	Cont. Crop	13.0	10.0	27.0	265.0	7.0	6.5	39.0	256.0
	Total	235.0	220.0	36.2	7,960.0	100.0	95.0	89.0	8,455.0
1996	Irrigated	18.0	16.5	57.0	940.0	111.0	108.0	92.0	9,960.0
	Non-Irrigated	242.0	219.5	23.0	5,090.0	14.0	12.0	30.0	360.0
	Total	260.0	236.0	25.6	6,030.0	125.0	120.0	86.0	10,320.0
1997	Irrigated	20.0	18.5	69.0	1,274.0	96.0	91.0	86.0	7,798.0
	Non-Irrigated	240.0	223.5	28.0	6,313.0	19.0	14.0	43.0	602.0
	Total	260.0	242.0	31.4	7,587.0	115.0	105.0	80.0	8,400.0
1998	Irrigated	12.5	11.5	71.0	814.0	90.0	77.0	89.0	6,884.0
	Non-Irrigated	221.5	198.5	30.0	5,976.0	15.0	8.0	32.0	256.0
	Total	234.0	210.0	32.3	6,790.0	105.0	85.0	84.0	7,140.0
1999	Irrigated	14.0	11.8	69.0	812.0	75.0	72.0	95.0	6,840.0
	Non-Irrigated	196.0	181.2	31.0	5,581.0	15.0	13.0	36.0	470.0
	Total	210.0	193.0	33.1	6,393.0	90.0	85.0	86.0	7,310.0
U.S.									
1998	Total	65,821.0	59,002.0	43.2	2,547,321.0	6,337.0	5,864.0	60.0	352,125.0
1999	Total	62,814.0	53,909.0	42.7	2,302,443.0	5,223.0	4,758.0	59.2	281,853.0

**OATS: ACREAGE AND PRODUCTION,
WYOMING BY CROPPING PRACTICE 1990-99, U.S. 1998-99**

Cropping Practice	Year	Planted	Harvested	Yield per Harv. Acre	Production	Year	Planted	Harvested	Yield per Harv. Acre	Production
		1,000 Acres		Bu.	1,000 Bu.		1,000 Acres		Bu.	1,000 Bu.
Irrigated	1990	35.0	19.0	61.7	1,173.0	1995	47.0	20.0	84	1,683.0
Non-Irrigated		25.0	16.0	22.9	367.0		21.0	13.0	33	429.0
Total		60.0	35.0	44.0	1,540.0		68.0	33.0	64	2,112.0
Irrigated	1991	33.3	16.5	68.5	1,130.5	1996	34.0	20.0	70	1,396.0
Non-Irrigated		21.7	15.5	36.5	565.5		16.0	12.0	25	300.0
Total		55.0	32.0	53.0	1,696.0		50.0	32.0	53	1,696.0
Irrigated	1992	34.0	16.0	69.9	1,118.0	1997	43.0	19.0	73	1,390.0
Non-Irrigated		21.0	14.0	38.0	532.0		27.0	16.0	31	500.0
Total		55.0	30.0	55.0	1,650.0		70.0	35.0	54	1,890.0
Irrigated	1993	37.0	15.0	76.0	1,140.0	1998	40.0	13.0	81	1,052.0
Non-Irrigated		18.0	10.0	41.0	410.0		20.0	9.0	32	290.0
Total		55.0	25.0	62.0	1,550.0		60.0	22.0	61	1,342.0
Irrigated	1994	35.0	13.0	69.0	897.0	1999	38.0	13.0	82	1,060.0
Non-Irrigated		20.0	11.0	27.5	303.0		22.0	14.0	34	479.0
Total		55.0	24.0	50.0	1,200.0		60.0	27.0	57	1,539.0
U.S.										
Total	1998	4,892.0	2,755.0	60.2	165,981.0					
Total	1999	4,670.0	2,453.0	59.6	146,218.0					

CORN: ACREAGE, PRODUCTION, AND VALUE, WYOMING 1990-99, U.S. 1998-99

Year	Planted	Harvested for Grain	Yield per Harvested Acre	Production	Mkt Year Avg Price	Value of Production	Harvested for Silage	Yield per Harvested Acre	Production
CORN FOR GRAIN						CORN FOR SILAGE			
	1,000 Acres		Bushels	1,000 Bushels	Dollar per Bu.	1,000 Dollars	1,000 Acres	Tons	1,000 Tons
1990	90	50	120.0	6,000	2.42	14,520	39	19.0	741
1991	80	49	119.0	5,831	2.43	14,169	30	19.0	570
1992	90	53	98.0	5,194	2.30	11,946	33	16.0	528
1993	95	44	80.0	3,520	2.65	9,328	46	16.0	736
1994	80	48	122.2	5,856	2.45	14,347	30	18.0	540
1995	80	48	104.0	4,992	3.90	19,469	29	17.0	493
1996	85	50	123.0	6,150	2.90	17,835	33	18.0	594
1997	85	52	135.0	7,020	2.52	17,690	32	21.0	672
1998	95	60	127.0	7,620	2.00	15,240	34	19.0	646
1999	85	52	118.0	6,136	1.80 1/	11,045	31	20.0	620
U.S.									
1998	80,165	72,589	134.4	9,758,685	1.94	18,922,084	5,913	16.1	95,479
1999	77,431	70,537	133.8	9,437,337	1.90 1/	17,949,707	6,062	15.9	96,169

1/The 1999 marketing year average price is preliminary.

**SUGARBEETS & POTATOES: ACREAGE, PRODUCTION, AND VALUE,
WYOMING 1990-99, U.S. 1998-99**

Year	Planted	Harvested	Yield per Harv Acre	Production	Mkt Year Avg Price	Value of Production
SUGARBEETS						
	1,000 Acres		Tons	1,000 Tons	Dollars per Ton	1,000 Dollars
1990	65.0	63.8	20.5	1,308	40.50	52,974
1991	69.0	66.4	20.6	1,368	38.30	52,394
1992	71.0	69.1	20.8	1,437	40.70	58,486
1993	66.0	64.4	19.7	1,269	40.70	51,648
1994	63.0	61.3	18.0	1,103	38.20	42,135
1995	63.0	61.5	20.3	1,249	37.70	47,087
1996	58.0	56.8	18.9	1,074	46.50	49,941
1997	63.0	60.9	20.4	1,240	38.50	47,740
1998	56.0	53.4	20.3	1,084	39.00	42,276
1999	58.0	57.1	21.1	1,205	1/	1/
U.S.						
1998	1,497.8	1,450.7	22.4	32,499	36.40	1,181,494
1999	1,560.6	1,527.3	21.9	33,420	1/	1/
ALL POTATOES						
	1,000 Acres		Cwt.	1,000 Cwt.	Dollars per Cwt.	1,000 Dollars
1990	2.3	2.2	255	561	6.30	3,534
1991	2.1	2.0	260	520	4.50	2,340
1992	1.7	1.6	280	448	6.20	2,778
1993	1.8	1.8	280	504	7.60	3,830
1994	1.7	1.7	280	476	7.15	3,403
1995	1.5	1.5	260	390	7.00	2,730
1996	0.9	0.8	280	224	7.00	1,568
1997	0.7	0.7	300	210	5.05	1,061
1998	0.4	0.4	300	120	4.00	480
1999	0.5	0.5	296	148	5.10 2/	755
U.S.						
1998	1,416.6	1,387.7	343	475,771	5.56	2,633,198
1999	1,377.0	1,332.6	359	478,398	5.84 2/	2,782,762

1/Data not available at time of publication.

2/The 1999 marketing year average price is preliminary.



DRY BEANS: ACREAGE, PRODUCTION, AND VALUE, WYOMING 1990-99, U.S. 1998-99


Year	Class	Planted	Harvested	Yield per Harvested Acre	Production	Mkt Yr Avg Price	Value of Production
		1,000 Acres		Pounds	1,000 Cwt.	Dollars per Cwt.	1,000 Dollars
1990	All	50.0	49.0	1,970	965	16.80	16,212
	Pinto	44.5	43.6	1,930	840		
	Great Northern	5.5	5.4	2,310	125		
1991	All	42.0	41.0	1,950	800	13.90	11,120
	Pinto	37.0	36.1	1,930	696		
	Great Northern	5.0	4.9	2,120	104		
1992	All	34.0	32.0	1,850	592	18.40	10,893
	Pinto	28.0	26.5	1,830	484		
	Great Northern	2.5	2.2	2,000	44		
	Navy	2.5	2.4	1,960	47		
	Other	1.0	0.9	1,890	17		
1993	All	38.0	26.0	1,300	339	25.90	8,780
	Pinto	32.0	22.0	1,330	293		
	Great Northern	2.0	1.2	1,420	17		
	Navy	2.0	1.2	1,080	13		
	Other	2.0	1.6	1,000	16		
1994	All	42.0	39.0	1,910	743	17.70	13,151
	Pinto	36.0	34.0	1,900	646		
	Great Northern	3.0	2.8	2,110	59		
	Navy	2.0	1.6	1,690	27		
	Other	1.0	0.6	1,830	11		
1995	All	31.0	28.0	1,800	504	21.10	10,634
	Pinto	24.0	22.0	1,830	403		
	Great Northern	4.0	3.4	1,820	62		
	Navy	2.0	1.7	1,470	25		
	Other	1.0	0.9	1,560	14		
1996	All	32.0	31.0	2,250	699	22.00	15,378
	Pinto	24.0	23.3	2,250	524		
	Great Northern	4.0	3.9	2,490	97		
	Navy	3.0	2.9	1,900	55		
	Other	1.0	0.9	2,560	23		
1997	All	32.0	31.0	2,260	700	19.60	13,720
	Pinto	25.0	24.3	2,270	552		
	Great Northern	4.0	3.9	2,310	90		
	Navy	2.0	1.9	2,160	41		
	Other	1.0	0.9	1,890	17		
1998	All	39.0	37.0	2,180	808	16.50	13,332
	Pinto	28.0	27.0	2,140	578		
	Great Northern	6.0	5.5	2,310	127		
	Black	3.0	2.8	2,390	67		
	Other	2.0	1.7	2,120	36		
1999	All	40.0	39.0	2,020	788	16.50 1/	13,002
	Pinto	28.0	27.5	2,030	558		
	Great Northern	8.0	7.7	2,030	156		
	Navy	2.0	1.9	1,950	37		
	Other	2.0	1.9	1,950	37		
U.S.							
1998	All	2,014.1	1,917.7	1,586	30,418	19.00	567,243
1999	All	2,023.0	1,877.0	1,770	33,230	17.60 1/	587,857

1/ The 1999 marketing year average price is preliminary.

**HAY: ACREAGE AND PRODUCTION BY CROPPING PRACTICE,
WYOMING 1990-99, U.S. 1998-99**

Year	Cropping Practice	Acres Harvested	Yield per Acre	Production	Acres Harvested	Yield per Acre	Production	Acres Harvested	Yield per Acre	Production
		1,000	Tons	1,000 Tons	1,000	Tons	1,000 Tons	1,000	Tons	1,000 Tons
		ALFALFA HAY			OTHER HAY			ALL HAY		
1990	Irrigated	436.0	2.84	1,238.0	451.0	1.30	587.0	887.0	2.06	1,825.0
	Nonirrigated	134.0	0.97	130.0	139.0	0.87	121.0	273.0	0.92	251.0
	Total	570.0	2.40	1,368.0	590.0	1.20	708.0	1,160.0	1.79	2,076.0
1991	Irrigated	500.0	2.89	1,446.0	520.0	1.59	828.0	1,020.0	2.23	2,274.0
	Nonirrigated	140.0	1.10	154.0	160.0	1.20	192.0	300.0	1.15	346.0
	Total	640.0	2.50	1,600.0	680.0	1.50	1,020.0	1,320.0	1.98	2,620.0
1992	Irrigated	390.0	2.80	1,092.0	490.0	1.28	628.0	880.0	1.95	1,720.0
	Nonirrigated	130.0	0.80	104.0	100.0	0.80	80.0	230.0	0.80	184.0
	Total	520.0	2.30	1,196.0	590.0	1.20	708.0	1,110.0	1.72	1,904.0
1993	Irrigated	460.0	2.97	1,366.0	480.0	1.68	806.0	940.0	2.31	2,172.0
	Nonirrigated	180.0	1.30	234.0	150.0	1.35	202.0	330.0	1.32	436.0
	Total	640.0	2.50	1,600.0	630.0	1.60	1,008.0	1,270.0	2.05	2,608.0
1994	Irrigated	445.0	2.86	1,271.0	440.0	1.30	570.0	885.0	2.08	1,841.0
	Nonirrigated	165.0	0.80	132.0	80.0	0.68	54.0	245.0	0.76	186.0
	Total	610.0	2.30	1,403.0	520.0	1.20	624.0	1,130.0	1.79	2,027.0
1995	Irrigated	430.0	3.20	1,384.0	520.0	1.60	822.0	950.0	2.30	2,206.0
	Nonirrigated	210.0	1.60	344.0	140.0	1.20	168.0	350.0	1.50	512.0
	Total	640.0	2.70	1,728.0	660.0	1.50	990.0	1,300.0	2.09	2,718.0
1996	Irrigated	425.0	3.00	1,274.0	490.0	1.30	632.0	915.0	2.10	1,906.0
	Nonirrigated	195.0	1.10	214.0	110.0	0.80	88.0	305.0	1.00	302.0
	Total	620.0	2.40	1,488.0	600.0	1.20	720.0	1,220.0	1.81	2,208.0
1997	Irrigated	410.0	3.50	1,452.0	480.0	1.50	738.0	890.0	2.50	2,190.0
	Nonirrigated	230.0	1.20	276.0	140.0	0.90	130.0	370.0	1.10	406.0
	Total	640.0	2.70	1,728.0	620.0	1.40	868.0	1,260.0	2.06	2,596.0
1998	Irrigated	420.0	3.30	1,398.0	440.0	1.60	720.0	860.0	2.50	2,118.0
	Nonirrigated	180.0	.90	162.0	150.0	1.10	165.0	330.0	1.00	327.0
	Total	600.0	2.60	1,560.0	590.0	1.50	885.0	1,190.0	2.05	2,445.0
1999	Irrigated	450.0	3.30	1,470.0	470.0	1.70	800.0	920.0	2.50	2,270.0
	Nonirrigated	210.0	1.50	312.0	160.0	1.30	208.0	370.0	1.40	520.0
	Total	660.0	2.70	1,782.0	630.0	1.60	1,008.0	1,290.0	2.16	2,790.0
U.S.										
1998	Total	23,672.0	3.48	82,310.0	36,404.0	1.91	69,470.0	60,076.0	2.53	151,780.0
1999	Total	23,985.0	3.50	83,924.0	39,175.0	1.92	75,153.0	63,160.0	2.52	159,077.0

SMALL GRAINS & HAY: PRODUCTION AND VALUE, WYOMING 1990-99

Year	Production 1,000 Bu.	Mkt Yr Avg Price Dollars/Bu.	Value of Production 1,000 Dollars	Production 1,000 Bu.	Mkt Yr Avg Price Dollars/Bu.	Value of Production 1,000 Dollars	Production 1,000 Tons	Mkt Yr Avg Price Dollars/Ton	Value of Production 1,000 Dollars
WINTER WHEAT				BARLEY			ALFALFA HAY		
1990	5,945	2.40	14,268	9,250	3.40	31,450	1,368	76.00	103,968
1991	5,800	3.26	18,908	10,530	3.42	36,013	1,600	61.50	98,400
1992	5,000	3.10	15,500	10,125	3.35	33,919	1,196	72.50	86,710
1993	5,600	3.20	17,920	9,460	3.07	29,042	1,600	73.00	116,800
1994	4,320	3.55	15,336	7,600	2.99	22,724	1,403	85.00	119,255
1995	7,200	4.60	33,120	8,455	2.98	25,196	1,728	72.00	124,416
1996	5,250	4.00	21,000	10,320	3.33	34,366	1,488	77.50	115,320
1997	6,975	3.10	21,623	8,400	3.32	27,888	1,728	86.00	148,608
1998	6,400	2.48	15,872	7,140	2.63	18,778	1,560	76.00	118,560
1999 1/	6,105	2.20	13,431	7,310	3.05	22,296	1,782	67.00	119,394
SPRING WHEAT				OATS			OTHER HAY		
1990	168	2.42	407	1,540	1.37	2,110	708	77.00	54,516
1991	120	3.20	384	1,696	1.51	2,561	1,020	59.50	60,690
1992	588	3.05	1,793	1,650	1.55	2,558	708	70.00	49,560
1993	546	3.40	1,856	1,550	1.55	2,403	1,008	67.50	68,040
1994	700	3.45	2,415	1,200	1.55	1,860	624	78.00	48,672
1995	760	4.50	3,420	2,112	1.85	3,907	990	66.00	65,340
1996	780	3.85	3,003	1,696	2.00	3,392	720	69.50	50,040
1997	612	3.12	1,909	1,890	1.86	3,515	868	77.00	66,836
1998	390	2.71	1,057	1,342	1.70	2,281	885	71.00	62,835
1999 1/	288	2.40	691	1,539	1.50	2,309	1,008	60.50	60,984
ALL WHEAT							ALL HAY		
1990	6,113	2.40	14,675				2,076	75.50	156,738
1991	5,920	3.26	19,292				2,620	61.00	159,820
1992	5,588	3.10	17,293				1,904	72.00	136,270
1993	6,146	3.25	19,776				2,608	72.00	184,840
1994	5,020	3.55	17,751				2,027	84.50	167,927
1995	7,960	4.60	36,540				2,718	71.50	189,756
1996	6,030	4.00	24,003				2,208	76.50	163,360
1997	7,587	3.10	23,532				2,596	85.00	215,444
1998	6,790	2.49	16,929				2,445	76.00	181,395
1999 1/	6,393	2.20	14,122				2,790	66.00	180,378

1/ The 1999 marketing year average price is preliminary.

**SEED PRODUCTION: ALFALFA SEED AND DRY BEAN SEED,
ACREAGE AND PRODUCTION, WYOMING 1999 1/**

Year	Harvested Acres	Pounds per Harvested Acre	Production
ALFALFA SEED			
1999	14,700	590	1,000 Pounds 8,673
DRY BEAN SEED 2/			
1999	Type		Cwt.
	All	11,000	2,250
	Pinto	7,700	2,410
	Navy	2,400	1,890
	Other 3/	900	1,870
			16,900

1/Source: Wyoming Seed Certification Service; includes both certified and common seed acres.

2/Also included in total dry bean acreage and production estimates elsewhere in this publication.

3/Includes Black, Cranberry, Great Northern, Lt. Red Kidney, Small Red, White Kidney, and Pink.

GRAIN & HAY STOCKS: WYOMING 1995-99

Year	Location	Mar 1	Jun 1	Sep 1	Dec 1
1,000 Bu.					
ALL WHEAT 1/					
1995	Off Farm	2/	343	2,703	2/
1996	Off Farm	2/	2/	1,627	2/
1997	Off Farm	2/	251	2,223	2,257
1998	Off Farm	1,875	1,084	2,429	1,763
1999	Off Farm	1,622	1,012	2,649	1,737
BARLEY					
1995	On Farm	600	300	1,500	600
1996	On Farm	400	250	2,200	600
1997	On Farm	450	200	2,700	700
1998	3/				
1995	Off Farm	2/	2/	2/	2/
1996	Off Farm	1,586	2/	2/	2/
1997	Off Farm	2/	2/	2/	2,611
1998	Off Farm	1,723	2/	2/	2/
1999	Off Farm	2,470	2/	3,301	2/
OATS 1/					
1995	Off Farm	33	7	29	31
1996	Off Farm	27	14	11	2/
1997	Off Farm	2/	6	28	2/
1998	Off Farm	17	8	2/	2/
1999	Off Farm	2/	2/	22	19
CORN 1/					
1995	Off Farm	215	2/	12	151
1996	Off Farm	2/	2/	2/	41
1997	Off Farm	21	35	2/	186
1998	Off Farm	32	23	2/	250
1999	Off Farm	2/	2/	2/	145
ALL HAY					
1,000 Tons					
		May 1		Dec 1	
1995	On Farm	182		2,636	
1996	On Farm	734		1,965	
1997	On Farm	287		2,129	
1998	On Farm	363		2,372	
1999	On Farm	611		2,486	

1/On farm data not published.

2/Off farm data not published to avoid individual disclosure.

3/On farm series discontinued.

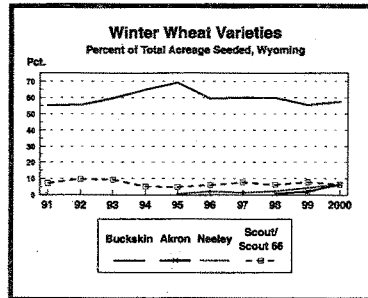
OFF FARM STORAGE CAPACITY: WYOMING 1995-99

Date	Number of Facilities	Rated Capacity (1,000 Bu.)
December 1, 1995	20	8,990
December 1, 1996	20	8,920
December 1, 1997	18	8,640
December 1, 1998	18	9,000
December 1, 1999	19	9,220

**WINTER WHEAT: PERCENT OF TOTAL ACREAGE SEEDED BY VARIETY,
WYOMING CROP YEARS 1991-2000**

Variety	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Percent										
Buckskin	55.3	55.5	59.6	64.8	69.2	59.4	60.1	59.9	55.4	57.6
Akron								0.9	2.0	6.5
Neeley	0.1				0.6	2.2	1.5	2.3	4.4	6.3
Scout/Scout 66	7.2	9.8	9.3	5.1	4.9	6.0	7.7	6.2	7.8	6.3
Lamar	0.6	2.7	2.2	4.9	6.4	7.3	7.6	5.5	6.6	4.4
Arnpahoe	1.7	1.2	1.1	1.9	1.2	2.2	0.8	2.1	4.3	4.4
Pronghorn							0.9	1.7	1.8	4.1
Tomahawk	0.2			0.1	0.1	1.2	0.8	1.3	1.4	2.0
Hawk	4.2	4.8	1.8	3.0	2.4	2.5	1.7	2.0	1.0	1.9
Redwin	3.7	4.2	4.5	2.0	1.2	2.6	1.0	0.4	0.5	1.3
Cheyenne	5.7	5.1	4.5	4.7	3.4	3.7	3.5	5.7	5.2	1.0
Others 1/	21.5	16.7	17.0	13.5	10.6	12.9	14.4	12.0	9.6	4.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

1/Other varieties for 2000 include Abilene, Alliance, Centurk, Dakota, Lancer, Larado, Longhorn, Niobrara, Ogallala, Quantum, Rawhide, Tam 107, Tiber, Turkey Red, and Yuma.



**WINTER WHEAT: PERCENT OF TOTAL ACREAGE SEEDED BY VARIETY WITHIN DISTRICT,
WYOMING 2000 CROP**

Variety	District 2 Northeast 1/	District 5 Southeast 2/	Remainder of State	State
Percent				
Buckskin	16.5	63.3	74.8	57.6
Akron		7.3	13.2	6.5
Neeley	49.7			6.3
Scout/Scout 66		7.4		6.3
Lamar		5.2		4.4
Arnpahoe	16.1	2.8		4.4
Pronghorn		4.8		4.1
Tomahawk		2.3		2.0
Hawk		2.2		1.9
Redwin	10.0			1.3
Cheyenne		1.1		1.0
Others 3/	7.7	3.6	12.0	4.2
Total	100.0	100.0	100.0	100.0
Acres Seeded 4/	24,000	162,000	4,000	190,000

1/District 2 includes Campbell, Crook, Johnson, Sheridan, and Weston Counties.

2/District 5 includes Converse, Crocker, Laramie, Niobrara, and Platte Counties.

3/Other varieties are shown in the footnote above.

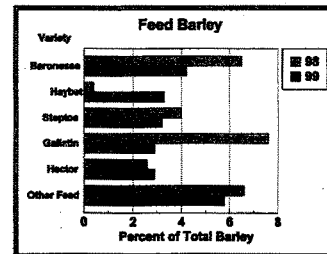
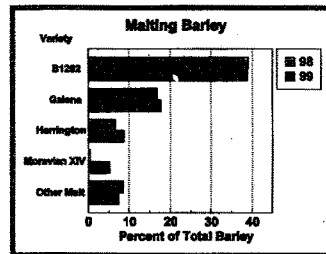
4/Preliminary District acreage estimates.

BARLEY: PERCENT OF TOTAL ACREAGE SEEDING BY VARIETY, WYOMING, 1993-99

Variety	1993	1994	1995	1996	1997	1998	1999
B1202 1/	40.8	44.5	46	36.4	40.5	39.0	38.8
Galena	8.1	15.5	20.0	15.1	18.9	16.9	17.8
Harrington 1/		0.4	3.5	5.2	5.0	6.5	8.6
Moravian 14						0.4	5.1
Baronesse			0.9	3.4	1.2	6.5	4.2
Haybet				0.3	0.4	0.4	3.3
Steppe	6.5	5.5	2.0	4.1	5.2	4.0	3.2
Clark	3.1	2.7	2.0	2.4	1.8	2.1	2.9
Gallatin	3.8	3.6	5.0	6.4	6.5	7.6	2.9
Hector	2.0	4.1	2.0	3.1	0.6	2.6	2.9
Moravian III	20.4	2.7	2.0	3.7	3.0	3.2	2.3
Horsford				0.1	1.0	0.4	1.6
Others 2/	15.3	21.0	16.6	19.8	15.9	10.4	6.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

1/Variety recommended for malting purposes in Wyoming for 1999 by the American Malting Barley Association.

2/Other feed and malting varieties reported with less than one percent of the total include 5133, 5533, 5648, 9921, Bowman, Columbia, Georgia, Hazen, Idagold, Klages, Medallion, Merit, Mores, Otis, Oxbow, Piroline, Rollo, Stander, and Westford. Unknown varieties are excluded.

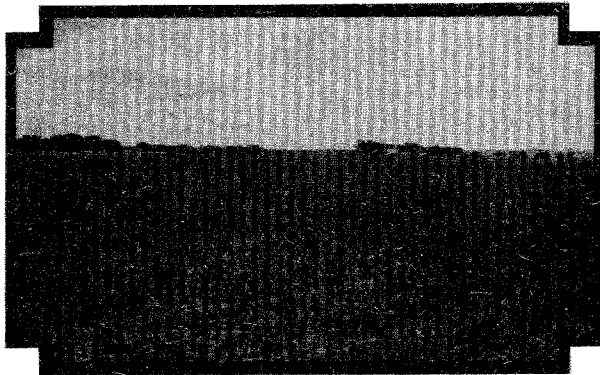
**WYOMING BARLEY VARIETIES: SEEDING ACREAGE BY DISTRICTS, 1999**

Variety	District 10 Northwest	District 20 Northeast	District 30 Southwest	District 40 South Central	District 50 Southeast	STATE
Acres						
B1202 1/	32,000		2,000		900	34,900
Galena	16,000					16,000
Harrington 1/	3,200	1,500	2,000	1,000		7,700
Moravian 14	700				3,900	4,600
Baronesse	100	600	2,100	200	800	3,800
Haybet	100	2,900				3,000
Steppe		200	1,700		1,000	2,900
Clark			2,600			2,600
Gallatin	200	1,900	500			2,600
Hector		1,600	1,000			2,600
Moravian III	2,100					2,100
Horsford		400	100		900	1,400
5533			900			900
Hazen					900	900
9221			800			800
Other 2/	1,100	400	1,300	300	100	3,200
Total	55,500	9,500	15,000	1,500	5,500	90,000

1/Variety recommended for malting purposes in Wyoming for 1999 by the American Malting Barley Association.

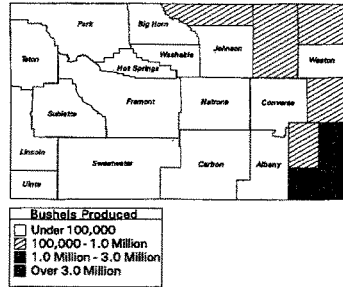
2/Other feed and malting varieties reported include 5133, 5648, Bowman, Columbia, Georgia, Idagold, Klages, Medallion, Merit, Mores, Otis, Oxbow, Piroline, Rollo, Stander, and Westford. Unknown varieties are excluded.

CROP COUNTY ESTIMATES

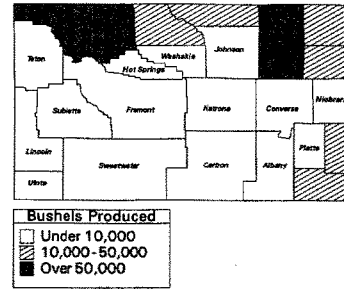


SMALL GRAINS DISTRIBUTION MAPS

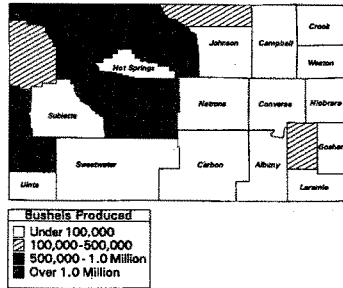
1999 Winter Wheat Production



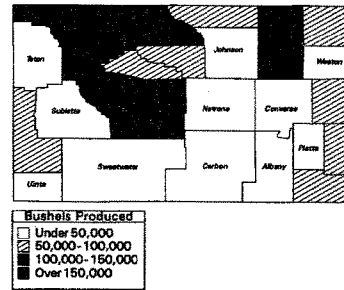
1999 Spring Wheat Production



1999 Barley Production



1999 Oats Production



WINTER WHEAT: ACREAGE, YIELD, AND PRODUCTION, BY COUNTY, WYOMING, 1998

County and District	Total				Irrigated			Non-Irrigated		
	Planted	Harv	Yield	Production	Harv	Yield	Production	Harv	Yield	Production
	Acres	Acres	Bu	Bu	Acres	Bu	Bu	Acres	Bu	Bu
Big Horn										
Fremont										
Hot Springs										
Park										
Washakie										
NW District										
Campbell	14,100	10,000	34	336,000				10,000	34	336,000
Crook	11,600	6,700	38	256,600						
Johnson										
Sheridan	2,400	2,200	30	66,000				2,200	30	66,000
Weston										
Other City	1,900	1,100	37	40,400	500	62	31,000	7,300	36	266,000
NE District	30,000	20,000	35	699,000	500	62	31,000	19,500	34	668,000
Lincoln										
Sublette										
Teton										
Uinta										
West District										
Albany										
Carbon										
Natrona										
Sweetwater										
SE District										
Converse										
Goshute	49,700	47,900	33	1,563,000	1,900	72	137,000	46,000	31	1,426,000
Laramie	108,000	102,200	33	3,337,000	5,200	77	400,000	97,000	30	2,937,000
Niobrara										
Platte	19,000	18,500	26	480,000						
Other City	9,000	7,400	32	238,000	900	58	52,000	25,000	27	666,000
SE District	185,700	176,000	32	5,618,000	8,000	74	589,000	168,000	30	5,029,000
Other Dist	4,500	4,000	21	83,000				4,000	21	83,000
TOTAL	772,000	706,000	32	6,400,000	8,500	73	620,000	191,500	30	5,780,000

75
County Estimates

WINTER WHEAT: ACREAGE, YIELD, AND PRODUCTION, BY COUNTY, WYOMING, 1999

County and District	Total				Irrigated			Non-Irrigated		
	Planted	Harv	Yield	Production	Harv	Yield	Production	Harv	Yield	Production
	Acres	Acres	Bu	Bu	Acres	Bu	Bu	Acres	Bu	Bu
Big Horn										
Fremont										
Hot Springs										
Park										
Washakie										
NW District										
Campbell	12,400	11,400	36	410,000						
Crook	9,000	7,400	47	349,000						
Johnson										
Sheridan	3,200	3,000	39	117,000						
Weston										
Other City	2,400	1,200	35	42,000						
NE District	27,000	23,000	40	918,000						
Lincoln										
Sublette										
Teton										
Uinta										
West District										
Albany										
Carbon										
Natrona										
Sweetwater										
SE District										
Converse	1,800	1,500	29	44,000						
Goshute	41,000	37,000	30	1,110,000	2,000	65	130,000	35,000	28	980,000
Laramie	103,000	101,000	33	3,377,000	5,000	79	396,000	96,000	31	2,981,000
Niobrara	6,000	3,200	33	106,000						
Platte	17,200	15,900	28	440,000	400	60	24,000	15,500	27	416,000
Other City					200	50	10,000	4,500	31	140,000
SE District	169,000	158,600	32	5,077,000	7,600	74	560,000	151,000	30	4,517,000
Other Dist	4,000	3,400	32	110,000	2,400	58	140,000	24,000	37	888,000

76
C
o
u
n
t
y
E
s
t
i
m
a
t
e
s

SPRING WHEAT: ACREAGE, YIELD, AND PRODUCTION, BY COUNTY, WYOMING, 1998

County and District	Total				Irrigated			Non-Irrigated		
	Planted	Harv	Yield	Production	Harv	Yield	Production	Harv	Yield	Production
	Acres	Acres	Bu.	Bu.	Acres	Bu.	Bu.	Acres	Bu.	Bu.
Big Horn										
Fremont										
Hot Springs										
Park	1,200	1,100	76	83,500	1,100	76	83,500			
Washakie										
Other Cnty	800	700	67	46,900	700	67	46,900			
NW District	2,000	1,800	72	130,400	1,800	72	130,400			
Campbell	2,300	1,700	27	45,800				1,700	27	45,800
Crook	2,900	1,000	30	30,000				1,000	30	30,000
Johnson										
Sheridan	600	500	28	14,200						
Weston	1,200	500	47	23,600						
Other Cnty					300	52	15,600	700	32	22,200
NE District	7,000	3,700	31	113,600	300	52	15,600	3,400	29	98,000
Lincoln										
Sublette										
Teton										
Uiana										
West District										
Albany										
Carbon										
Natrona										
Sweetwater										
SC District										
Converse										
Goshen										
Laramie	3,200	2,900	37	106,300						
Niobrara										
Platte										
Other Cnty	1,800	1,600	25	39,700	900	53	48,000	3,600	27	98,000
SE District	5,000	4,500	32	146,000	900	53	48,000	3,600	27	98,000
STATE	14,000	10,600	39	390,000	3,000	65	194,000	7,000	28	196,000

SPRING WHEAT: ACREAGE, YIELD, AND PRODUCTION, BY COUNTY, WYOMING, 1999

County and District	Total				Irrigated			Non-Irrigated		
	Planted	Harv	Yield	Production	Harv	Yield	Production	Harv	Yield	Production
	Acres	Acres	Bu.	Bu.	Acres	Bu.	Bu.	Acres	Bu.	Bu.
Big Horn										
Fremont										
Hot Springs										
Park										
Washakie										
Other Cnty	1,500	1,400	67	94,000	1,400	67	94,000			
NW District	2,500	1,400	67	94,000	1,400	67	94,000			
Campbell	2,100	1,900	33	63,000				1,900	33	63,000
Crook	2,300	1,600	25	40,000				1,600	25	40,000
Johnson										
Sheridan										
Weston	1,300	1,000	27	27,000						
Other Cnty	1,300	900	30	27,000				1,900	28	54,000
NE District	7,000	5,400	29	157,000				5,400	29	157,000
Lincoln										
Sublette										
Teton										
Uiana										
West District										
Albany										
Carbon										
Natrona										
Sweetwater										
SC District										
Converse										
Goshen										
Laramie										
Niobrara										
Platte										
Other Cnty	1,500	1,200	31	37,000						
SE District	1,500	1,200	31	37,000						
Other Dist					400	45	18,000	800	24	19,000
STATE	10,000	8,000	26	288,000	1,800	62	112,000	6,200	28	176,000

ALL WHEAT: ACREAGE, YIELD, AND PRODUCTION, BY COUNTY, WYOMING, 1998

County and District	Total				Irrigated			Non-Irrigated		
	Planted	Harv	Yield	Production	Harv	Yield	Production	Harv	Yield	Production
Big Horn										
Fremont										
Hot Springs										
Park	1,200	1,100	76	83,500	1,100	76	83,500			
Washakie	800	700	67	46,900	700	67	46,900			
Other Cnty										
NW District	2,000	1,800	72	130,400	1,800	72	130,400			
Campbell	16,400	11,700	33	381,800				11,700	33	381,800
Crook	14,500	7,700	37	286,600						
Johnson	3,000	2,700	30	80,200						
Sheridan										
Weston										
Other Cnty	3,100	1,600	40	64,000	800	58	46,600	11,200	34	384,200
NE District	37,000	23,700	34	812,600	800	58	46,600	22,900	33	766,000
Lincoln										
Sublette										
Teton										
Uinta										
West District										
Albany										
Carbon										
Natrona										
Sweetwater										
SC District										
Converse										
Goshute										
Laramie	111,200	105,100	33	3,443,300						
Niobrara	6,900	5,700	31	178,300						
Platte										
Other Cnty	72,600	69,700	31	2,142,400	8,900	72	637,000	171,600	30	5,127,000
SE District	190,700	180,500	32	5,764,000	8,900	72	637,000	171,600	30	5,127,000
Other Dist	4,300	4,000	21	83,000				4,000	21	83,000
STATE	234,800	210,800	32	6,796,000	11,500	71	814,000	198,500	30	5,976,000

77
C
o
u
n
t
y
E
s
t
i
m
a
t
e
s

ALL WHEAT: ACREAGE, YIELD, AND PRODUCTION, BY COUNTY, WYOMING, 1999

County and District	Total				Irrigated			Non-Irrigated		
	Planted	Harv	Yield	Production	Harv	Yield	Production	Harv	Yield	Production
Big Horn										
Fremont										
Hot Springs										
Park										
Washakie										
NW District										
Campbell	14,500	13,300	36	473,000						
Crook	11,300	9,000	43	389,000						
Johnson										
Sheridan										
Weston	3,400	2,000	30	60,000						
Other Cnty	4,800	4,100	37	153,000						
NE District	34,000	28,400	38	1,075,000						
Lincoln										
Sublette										
Teton										
Uinta										
West District										
Albany										
Carbon										
Natrona										
Sweetwater										
SC District										
Converse										
Goshute										
Laramie										
Niobrara										
Platte										
Other Cnty	170,500	159,800	32	5,114,000						
SE District	170,500	159,800	32	5,114,000						
Other Dist	5,500	4,800	43	204,000	11,800	69	812,000	181,200	31	5,581,000
STATE	210,000	193,000	33	6,393,000	11,800	69	812,000	181,200	31	5,581,000

BARLEY: ACREAGE, YIELD, AND PRODUCTION, BY COUNTY, WYOMING, 1998

County and District	Total				Irrigated			Non-Irrigated		
	Planted	Harv	Yield	Production	Harv	Yield	Production	Harv	Yield	Production
Big Horn	21,000	20,000	91	1,812,000	20,000	91	1,812,000			
Fremont	7,000	6,000	85	512,000	6,000	85	512,000			
Hot Springs	700	600	95	57,000	600	95	57,000			
Park	21,600	19,400	98	1,898,000	19,400	98	1,898,000			
Washakie	14,700	14,000	98	1,378,000	14,000	98	1,378,000			
NW District	85,000	60,000	94	5,657,000	60,000	94	5,657,000			
Campbell	2,600	1,300	24	31,200				1,300	24	31,200
Crook	4,000	1,400	35	48,800						
Johnson										
Sheridan	5,300	3,300	62	204,500						
Weston										
Other Cnty	600	300	55	16,500	2,300	72	166,000	2,700	38	103,800
NE District	12,500	6,300	48	301,000	2,300	72	166,000	4,000	34	135,000
Lincoln	15,900	10,400	57	594,000	8,600	64	512,000	2,400	34	82,000
Sublette										
Teton	3,000	2,500	72	180,000	2,500	72	180,000			
Uinta										
Other Cnty	100	100	30	3,000				100	30	3,000
West District	17,000	13,000	60	777,000	10,500	66	692,000	2,500	34	85,000
Albany										
Carbon										
Natrona	800	700	83	58,000	700	83	58,000			
Sweetwater										
Other Cnty	700	500	72	36,000	500	72	36,000			
SE District	1,500	1,200	78	94,000	1,200	78	94,000			
Converse										
Goshen	1,300	1,000	46	45,500						
Laramie	2,000	900	67	60,200						
Niobrara										
Platte	3,800	1,900	101	192,000	1,900	101	192,000			
Other Cnty	1,900	700	19	13,300	1,100	75	83,000	1,500	24	36,000
SE District	9,000	4,500	69	311,000	3,000	92	275,000	1,500	24	36,000
TOTAL	105,000	85,000	84	7,140,000	77,000	89	6,864,000	8,000	32	286,000

BARLEY: ACREAGE, YIELD, AND PRODUCTION, BY COUNTY, WYOMING, 1999

County and District	Total				Irrigated			Non-Irrigated		
	Planted	Harv	Yield	Production	Harv	Yield	Production	Harv	Yield	Production
Big Horn	17,500	17,400	98	1,703,000	17,400	98	1,703,000			
Fremont	5,800	5,700	97	550,100	5,700	97	550,100			
Hot Springs	700	700	107	75,000	700	107	75,000			
Park	19,000	18,800	100	1,887,500	18,800	100	1,887,500			
Washakie	12,500	12,400	109	1,357,400	12,400	109	1,357,400			
NW District	55,500	55,000	101	5,573,000	55,000	101	5,573,000			
Campbell	2,500	1,900	34	64,800				1,900	34	64,800
Crook	3,000	2,200	41	89,200						
Johnson										
Sheridan	3,500	3,000	59	175,600	800	96	77,000	2,200	45	98,600
Weston										
Other Cnty	500	400	56	22,400	700	86	60,000	1,900	27	51,600
NE District	9,500	7,500	47	352,000	1,500	91	137,000	6,000	36	215,000
Lincoln	12,400	11,400	54	616,100	7,000	65	458,000	4,400	36	158,100
Sublette										
Teton	2,500	2,500	58	145,200						
Uinta										
Other Cnty	100	100	45	4,500	2,100	63	132,800	500	34	16,900
West District	15,000	14,000	55	765,800	9,100	65	590,800	4,900	36	175,000
Albany										
Carbon										
Natrona										
Sweetwater	900	800	94	75,400	800	94	75,400			
Other Cnty	600	200	94	18,800	200	94	18,800			
SE District	1,500	1,000	94	94,200	1,000	94	94,200			
Converse	900	800	50	39,600						
Goshen					500	79	39,400			
Laramie	1,400	1,300	68	87,800						
Niobrara										
Platte	4,700	4,300	79	339,000						
Other Cnty	1,500	1,100	53	58,600	4,900	83	405,600	2,100	38	80,000
SE District	8,500	7,500	70	525,000	5,400	82	445,000	2,100	38	80,000
TOTAL	95,000	85,000	85	7,117,000	77,000	95	6,200,000	8,000	38	291,000

OATS: ACREAGE, YIELD, AND PRODUCTION, BY COUNTY, WYOMING, 1998

County and District	Total				Irrigated			Non-Irrigated		
	Planted	Harv	Yield	Production	Harv	Yield	Production	Harv	Yield	Production
Big Horn	5,400	2,100	102	215,000	2,100	102	215,000			
Fremont	5,400	900	89	80,000	900	89	80,000			
Hot Springs	900	400	75	30,000	400	75	30,000			
Park	3,800	2,500	83	208,000	2,500	83	208,000			
Washakie	2,500	1,100	84	92,000	1,100	84	92,000			
NW District	18,000	7,000	89	625,000	7,000	89	625,000			
Campbell	4,800	2,000	29	58,000				2,000	29	58,000
Crook	2,800	400	45	18,000						
Johnson	1,400	700	64	45,000						
Sheridan	2,600	1,300	65	85,000	800	76	61,000	500	48	24,000
Weston	2,400	1,600	49	79,000	400	70	28,000	1,200	43	51,000
Other City					800	64	51,000	300	40	12,000
NE District	14,000	6,000	48	285,000	2,000	70	140,000	4,000	36	145,000
Lincoln	4,700	1,400	67	94,000						
Sublette										
Teton										
Uinta										
Other City	800	100	80	8,000	1,000	84	84,000	500	36	18,000
West District	5,500	1,500	68	102,000	1,000	84	84,000	500	36	18,000
Albany										
Carbon										
Natrona	1,900	400	75	30,000	400	75	30,000			
Sweetwater	2,500	400	60	24,000	400	60	24,000			
Other City	1,600	700	40	28,000	200	70	14,000	500	28	14,000
SE District	6,000	1,500	55	82,000	1,000	68	68,000	500	28	14,000
Converse										
Goshute										
Laramie	4,500	1,600	48	76,000	600	72	43,000	1,000	33	33,000
Niobrara	3,900	2,200	28	62,000						
Platte	2,800	1,000	38	38,000	400	50	20,000	600	30	18,000
Other City	5,300	1,200	60	72,000	1,000	72	72,000	2,400	26	62,000
SE District	16,500	6,000	41	248,000	2,000	68	135,000	4,000	28	113,000
State	125,000	52,000	61	1,392,000	33,000	81	1,452,000	2,000	32	280,000

OATS: ACREAGE, YIELD, AND PRODUCTION, BY COUNTY, WYOMING, 1999

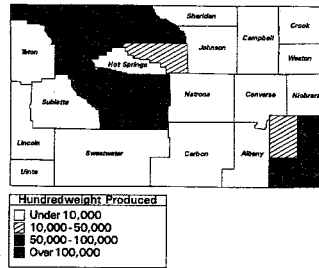
County and District	Total				Irrigated			Non-Irrigated		
	Planted	Harv	Yield	Production	Harv	Yield	Production	Harv	Yield	Production
Big Horn	5,000	2,600	91	237,000	2,600	91	237,000			
Fremont	5,200	1,400	94	132,000	1,400	94	132,000			
Hot Springs	1,300	700	83	58,000	700	83	58,000			
Park	4,000	2,100	95	200,000	2,100	95	200,000			
Washakie	2,000	1,200	69	83,000	1,200	69	83,000			
NW District	17,500	8,000	89	710,000	8,000	89	710,000			
Campbell	3,800	2,700	38	102,000						
Crook	4,000	2,200	36	80,000						
Johnson	1,000	500	58	29,000						
Sheridan	2,200	1,200	63	75,000	700	76	53,000	500	44	22,000
Weston	2,000	900	49	44,000						
Other City					800	61	49,000	5,500	37	206,000
NE District	12,000	7,500	44	330,000	1,500	68	102,000	6,000	38	228,000
Lincoln	4,700	1,500	62	93,000						
Sublette										
Teton										
Uinta										
Other City	800	200	80	16,000	1,000	80	80,000	700	41	29,000
West District	5,500	1,700	64	109,000	1,000	80	80,000	700	41	29,000
Albany										
Carbon										
Natrona	1,800	500	78	39,000	500	78	39,000			
Sweetwater	3,000	400	60	24,000	400	60	24,000			
Other City	1,200	400	48	19,000	100	70	7,000	300	40	12,000
SE District	6,000	1,900	65	82,000	1,000	70	70,000	300	40	12,000
Converse	2,000	400	55	22,000	400	55	22,000			
Goshute	3,500	1,800	39	70,000	400	70	28,000	1,400	30	42,000
Laramie	5,700	2,700	29	78,000						
Niobrara	3,500	2,200	40	88,000						
Platte	3,300	1,400	36	50,000						
Other City					700	69	48,000	5,600	30	168,000
SE District	18,000	8,500	56	306,000	1,500	65	98,000	7,000	30	210,000

79

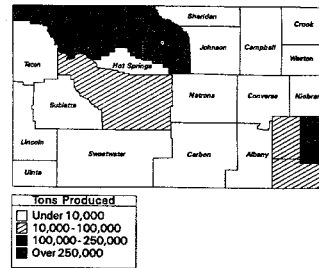
County Estimates

ROW CROPS AND HAY DISTRIBUTION MAPS

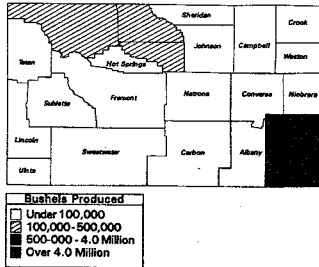
1999 Dry Bean Production



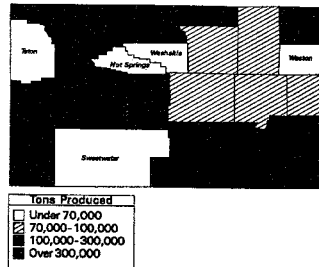
1999 Sugarbeet Production



1999 Corn for Grain Production



1999 All Hay Production



DRY BEANS: ACREAGE, YIELD, AND PRODUCTION, BY COUNTY, WYOMING, 1998

County and District	Total				Pinto Beans				All Other Beans			
	Planted	Harv	Yield	Production	Harv	Yield	Production	Harv	Yield	Production		
	Acres	Acres	Pounds	Cts	Acres	Pounds	Cts	Acres	Pounds	Cts		
Big Horn	7,400	7,000	2,090	146,400	4,900	2,100	103,000	2,100	2,070	43,400		
Fremont	3,000	2,900	2,240	65,000	2,900	2,240	65,000					
Hot Springs	300	300	2,000	6,000	300	2,000	6,000					
Park	7,800	7,300	2,040	148,600	5,800	2,000	116,000	1,500	2,170	32,600		
Washakie	1,500	1,400	1,860	26,000	1,400	1,860	26,000					
NW District	20,000	18,900	2,070	392,000	15,300	2,070	316,000	3,600	2,110	76,000		
Campbell												
Crook												
Johnson												
Sheridan												
Weston												
NE District												
Lincoln												
Sublette												
Teton												
Uinta												
West District												
Albany												
Carbon												
Natrona												
Sweetwater												
SE District												
Converse												
Goshen	12,800	12,200	2,260	276,100	6,600	2,090	138,000	5,600	2,470	138,100		
Laramie	4,200	4,000	2,430	97,000	3,400	2,500	85,000	600	2,000	12,000		
Niobrara	2,000	1,900	2,260	42,900	1,700	2,290	39,000	200	1,950	3,900		
Platte	19,000	18,100	2,300	416,000	11,700	2,240	262,000	6,400	2,410	154,000		
STATE	39,000	37,000	2,180	808,000	27,000	2,140	578,000	10,000	2,300	230,000		

81
C
o
u
n
t
y
E
s
t
i
m
a
t
e
s

DRY BEANS: ACREAGE, YIELD, AND PRODUCTION, BY COUNTY, WYOMING, 1999

County and District	Total				Pinto Beans				All Other Beans			
	Planted	Harv	Yield	Production	Harv	Yield	Production	Harv	Yield	Production		
	Acres	Acres	Pounds	Cts	Acres	Pounds	Cts	Acres	Pounds	Cts		
Big Horn	8,500	8,200	1,920	157,100	5,200	1,990	103,300	3,000	1,790	53,800		
Fremont	2,900	2,900	1,910	55,500	2,700	1,940	52,500	200	1,500	3,000		
Hot Springs												
Park	9,200	9,200	1,980	181,700	7,500	1,990	149,500	1,700	1,890	32,200		
Washakie												
Other Cnty	2,400	2,400	1,970	47,200	1,500	2,010	30,200	900	1,890	17,000		
NW District	23,000	22,700	1,940	441,500	16,900	1,990	335,500	5,800	1,830	106,000		
Campbell												
Crook												
Johnson												
Sheridan												
Weston												
NE District												
Lincoln												
Sublette												
Teton												
Uinta												
West District												
Albany												
Carbon												
Natrona												
Sweetwater												
SE District												
Converse												
Goshen	11,200	10,600	2,100	222,800	6,100	2,060	125,800	4,500	2,160	97,000		
Laramie	3,800	3,800	2,320	88,300								
Niobrara												
Platte	2,000	1,900	1,860	35,400								
Other Cnty					4,500	2,150	96,700	1,200	2,250	27,000		
SE District	17,000	16,300	2,130	346,500	10,600	2,100	222,500	5,700	2,180	124,000		
STATE	40,000	39,000	2,020	788,000	27,500	2,020	558,000	11,500	2,000	230,000		

82

C
o
u
n
t
y

E
s
t
i
m
a
t
e
s**SUGARBEETS: ACREAGE, YIELD, AND PRODUCTION, BY COUNTY, WYOMING, 1998**

County and District	Planted	Harvested	Yield	Production
	Acres			Tons
Big Horn	13,400	12,700	19.7	250,300
Fremont	3,200	2,900	21.1	61,100
Hot Springs				
Park	17,800	17,500	21.3	372,300
Washakie	9,400	8,700	21.0	182,300
NW District	43,800	41,800	20.7	866,000
Campbell				
Crook				
Johnson				
Sheridan				
Weston				
NE District				
Lincoln				
Sublette				
Teton				
Uinta				
West District				
Albany				
Carbon				
Natrona				
Sweetwater				
SC District				
Converse				
Goshen	6,300	5,900	19.4	114,300
Laramie	2,000	2,000	18.7	37,400
Niobrara				
Platte	3,700	3,500	17.8	62,300
SE District	12,000	11,400	18.8	214,000
Other District	200	200	20.0	4,000
STATE	56,000	53,400	20.3	1,084,000

SUGARBEETS: ACREAGE, YIELD, AND PRODUCTION, BY COUNTY, WYOMING, 1999

County and District	Planted	Harvested	Yield	Production
	Acres			Tons
Big Horn	11,000	10,900	27.2	296,300
Fremont	4,200	4,000	21.3	85,000
Hot Springs				
Park	15,500	15,300	20.8	318,800
Washakie	11,800	11,800	19.3	227,400
NW District	42,500	42,000	22.1	927,400
Campbell				
Crook				
Johnson				
Sheridan				
Weston				
NE District				
Lincoln				
Sublette				
Teton				
Uinta				
West District				
Albany				
Carbon				
Natrona				
Sweetwater				
SC District				
Converse				
Goshen	8,000	7,800	18.4	143,500
Laramie	3,100	3,000	18.2	54,500
Niobrara				
Platte	4,200	4,100	18.4	75,400
SE District	15,300	14,900	18.3	273,400
Other 1/	200	200	21.0	4,200
STATE	89,100	87,900	20.5	1,654,000

1/Total of other counties.

CORN: ACREAGE, YIELD, AND PRODUCTION, BY COUNTY, WYOMING, 1998

County and District	All Planted Acres	Grain			Silage		
		Harvested Acres	Yield Bls/Acre	Production Bls	Harvested Acres	Yield Tons/Acre	Production Tons
Big Horn	8,200	4,800	91	437,500	3,300	18.0	58,800
Fremont							
Hot Springs							
Park	4,500	1,100	115	126,500	3,300	19.0	63,400
Washakie	5,000	4,000	135	540,000	900	15.5	13,800
Other City	5,800	1,400	114	160,000	4,300	21.5	92,000
NW District	23,500	11,300	112	1,264,000	11,800	19.5	228,000
Campbell							
Crook							
Johnson							
Sheridan							
Weston							
Other City	3,800	200	40	8,000	3,500	19.0	66,000
NE District	3,800	200	40	8,000	3,500	19.0	66,000
Lincoln							
Sublette							
Teton							
Uinta							
West District							
Albany							
Carbon							
Natrona							
Sweetwater							
SE District							
Converse							
Goshute	42,500	35,500	135	4,783,500	6,800	22.5	152,100
Laramie	10,600	8,200	111	910,500	2,200	17.0	37,500
Niobrara							
Platte	12,000	4,600	138	636,000	7,300	15.5	113,000
Other City	1,400	200	90	18,000	1,200	22.5	26,800
SE District	66,500	48,500	131	6,348,000	17,500	19.0	328,400
Other Dist	1,200				1,200	19.0	22,800
State Total	142,000	82,000	112	9,224,000	42,000	19.5	822,000

83

County Estimates

CORN: ACREAGE, YIELD, AND PRODUCTION, BY COUNTY, WYOMING, 1999

County and District	All Planted Acres	Grain			Silage		
		Harvested Acres	Yield Bls/Acre	Production Bls	Harvested Acres	Yield Tons/Acre	Production Tons
Big Horn	6,800	2,100	100	210,000	4,000	17.5	70,000
Fremont	4,000	700	101	71,000	3,000	21.0	63,000
Hot Springs							
Park	4,500	1,000	130	130,000	3,400	21.5	73,000
Washakie							
Other City	3,700	2,000	128	256,000	1,600	24.0	38,000
NW District	19,000	5,800	115	667,000	12,000	20.5	244,000
Campbell							
Crook							
Johnson							
Sheridan							
Weston							
Other City	3,100				3,000	21.0	63,000
NE District	3,100				3,000	21.0	63,000
Lincoln							
Sublette							
Teton							
Uinta							
West District							
Albany							
Carbon							
Natrona							
Sweetwater							
SE District							
Converse							
Goshute	41,900	35,500	122	4,337,000	6,100	21.5	130,000
Laramie	8,500	6,500	87	567,000	1,900	17.0	32,500
Niobrara							
Platte	10,500	4,000	135	540,000	6,300	19.0	119,000
Other City	1,100				1,000	17.5	17,500
SE District	62,000	46,000	116	5,444,000	15,300	19.5	299,000
Other Dist	500	200	125	25,000	200	27.0	5,400

ALFALFA HAY: ACREAGE, YIELD, AND PRODUCTION, BY COUNTY, WYOMING, 1998

County and District	Total			Irrigated			Non-Irrigated		
	Harv	Yield	Production	Harv	Yield	Production	Harv	Yield	Production
Big Horn	27,000	4.1	110,500						
Fremont	71,000	4.1	289,600						
Hot Springs	15,000	2.2	33,000						
Park	39,000	3.8	146,900						
Washakie	13,000	4.1	53,000						
Other Cnty									
NW District	165,000	3.8	633,000	164,000	3.9	632,000	1,000	1.0	1,000
Campbell	51,000	0.8	42,500	3,000	3.0	9,000	48,000	0.7	33,500
Crook	70,000	1.0	71,500	6,000	2.3	14,000	64,000	0.9	57,500
Johnson	24,000	2.8	66,000						
Sheridan	48,000	2.0	98,000	25,000	3.0	75,000	23,000	1.0	23,000
Weston	22,000	1.5	34,000						
Other Cnty				28,000	2.9	82,000	18,000	1.0	18,000
NE District	215,000	1.5	312,000	62,000	2.9	180,000	153,000	0.9	132,000
Lincoln	28,000	2.5	69,500	19,800	2.8	55,500	8,200	1.7	14,000
Sublette	7,000	2.5	17,200						
Teton	7,000	2.5	17,700	6,800	2.6	17,500	200	1.0	200
Uinta	8,000	2.5	19,600						
Other Cnty				14,400	2.5	36,000	600	1.3	800
West District	50,000	2.5	124,000	41,000	2.7	109,000	9,000	1.7	15,000
Albany	11,000	2.0	22,100	10,900	2.0	22,000	100	1.0	100
Carbon	16,000	2.3	37,500						
Natrona	20,000	2.1	41,300						
Sweetwater	13,000	2.5	32,100						
Other Cnty				48,100	2.3	110,000	900	1.0	900
SC District	60,000	2.2	133,000	59,000	2.2	132,000	1,000	1.0	1,000
Converse	25,000	2.0	50,500	22,000	2.2	48,500	3,000	0.7	2,000
Goshute	32,000	4.3	137,000	30,800	4.4	135,500	1,200	1.3	1,500
Laramie	20,000	3.8	75,000	18,000	4.0	72,000	2,000	1.5	3,000
Niobrara	15,000	1.7	26,000	6,000	3.3	20,000	9,000	0.7	6,000
Piute	18,000	3.9	69,500	17,200	4.0	69,000	800	0.6	500
SE District	110,000	3.3	358,000	94,000	3.7	345,000	16,000	0.8	13,000
STATE	600,000	2.6	1,560,000	420,000	3.3	1,398,000	180,000	0.9	162,000

ALFALFA HAY: ACREAGE, YIELD, AND PRODUCTION, BY COUNTY, WYOMING, 1999

County and District	Total			Irrigated			Non-Irrigated		
	Harv	Yield	Production	Harv	Yield	Production	Harv	Yield	Production
Big Horn	30,000	3.9	118,400						
Fremont	70,000	4.0	277,400						
Hot Springs	11,000	2.0	21,700						
Park	37,000	3.4	125,500						
Washakie	12,000	3.7	44,000						
Other Cnty									
NW District	160,000	3.7	587,000	158,000	3.7	585,000	2,000	1.0	2,000
Campbell	59,000	1.3	79,000	2,000	3.0	6,000	57,000	1.3	73,000
Crook	79,000	1.8	140,500	8,000	2.3	18,500	71,000	1.7	122,000
Johnson	26,000	2.3	60,000						
Sheridan	53,000	2.5	132,000	34,000	2.8	96,000	19,000	1.9	36,000
Weston	28,000	1.2	32,500						
Other Cnty				26,000	2.4	61,500	28,000	1.1	31,000
NE District	245,000	1.8	444,000	70,000	2.6	182,000	175,000	1.5	262,000
Lincoln	34,000	2.4	81,700	25,700	2.7	69,000	8,300	1.5	12,700
Sublette	6,000	2.0	12,100						
Teton	7,000	2.3	16,400	6,700	2.4	16,000	300	1.3	400
Uinta	13,000	2.7	34,600						
Other Cnty				17,600	2.6	45,000	1,400	1.2	1,700
West District	60,000	2.4	144,800	50,000	2.6	130,000	10,000	1.5	14,800
Albany	11,000	2.1	22,800	10,700	2.1	22,500	300	1.0	300
Carbon	16,000	2.2	34,800						
Natrona	22,000	2.8	60,900						
Sweetwater	11,000	2.7	29,700						
Other Cnty				48,300	2.6	124,500	700	1.3	900
SC District	60,000	2.5	148,200	59,000	2.5	147,000	1,000	1.2	1,200
Converse	28,000	2.4	68,400	25,000	2.6	66,000	3,000	0.8	2,400
Goshute	35,000	4.3	152,000	33,000	4.5	149,000	2,000	1.5	3,000
Laramie	25,000	3.4	85,500	21,000	3.9	81,000	4,000	1.1	4,500
Niobrara	21,000	2.7	56,500	10,000	3.8	38,000	11,000	1.7	18,500
Piute	26,000	3.7	95,600	24,000	3.8	92,000	2,000	1.8	3,600
SE District	135,000	3.4	458,000	113,000	3.8	426,000	22,000	1.5	32,000
STATE	660,000	2.7	1,782,000	480,000	3.3	1,470,000	210,000	1.5	312,000

OTHER HAY: ACREAGE, YIELD, AND PRODUCTION, BY COUNTY, WYOMING, 1998

County and District	Total			Irrigated			Non-Irrigated		
	Harv	Yield	Production	Harv	Yield	Production	Harv	Yield	Production
Big Horn	4,000	2.3	9,200						
Premont	19,000	2.4	46,000						
Hot Springs	5,000	1.9	9,500						
Park	4,000	2.4	9,600						
Washakie	3,000	2.3	6,900						
Other County				32,000	2.4	77,000	3,000	1.3	4,000
NW District	35,000	2.3	81,000	32,000	2.4	77,000	3,000	1.3	4,000
Campbell	14,000	1.3	18,000	2,000	2.0	4,000	12,000	1.2	14,000
Crook	26,000	1.2	30,500	4,000	2.1	8,500	22,000	1.0	22,000
Johnson	11,000	1.5	16,500						
Sheridan	13,000	1.3	17,000	5,000	1.8	9,000	8,000	1.0	8,000
Weston	11,000	1.2	13,000						
Other County				8,000	1.8	14,500	14,000	1.1	15,000
NE District	75,000	1.3	95,000	19,000	1.9	36,000	56,000	1.1	59,000
Lincoln	49,000	1.3	65,000	34,500	1.5	51,500	14,700	0.9	13,500
Sublette	96,000	1.3	123,000						
Teton	7,000	2.4	16,500	6,700	2.4	16,000	300	1.7	500
Uinta	38,000	1.9	72,000						
Other County				116,000	1.5	172,500	18,000	1.3	22,500
West District	190,000	1.5	276,500	157,000	1.5	240,000	33,000	1.1	36,500
Albany	84,000	1.1	96,000	80,000	1.1	91,500	4,000	1.1	4,500
Carbon	71,000	1.8	131,000						
Natrona	14,000	2.0	27,500						
Sweetwater	11,000	2.0	21,500						
Other County				91,000	1.9	175,500	5,000	0.9	4,500
SE District	180,000	1.5	276,000	171,000	1.6	267,000	9,000	1.0	9,000
Converse	10,000	1.3	12,500	6,500	1.6	10,500	3,500	0.6	2,000
Goheen	16,000	1.9	30,000	7,500	2.2	16,500	8,500	1.6	13,500
Laramie	40,000	1.5	60,000	23,000	1.7	39,000	17,000	1.2	21,000
Niobrara	19,000	1.2	23,500	3,000	2.3	7,000	16,000	1.0	16,500
Platte	25,000	1.2	30,500	21,000	1.3	27,000	4,000	0.9	3,500
SW District	110,000	1.4	156,500	61,000	1.6	100,000	49,000	1.2	56,500
Total	725,000	1.6	1,052,000	675,000	1.7	1,000,000	50,000	1.3	62,000

85

County Estimates

OTHER HAY: ACREAGE, YIELD, AND PRODUCTION, BY COUNTY, WYOMING, 1999

County and District	Total			Irrigated			Non-Irrigated		
	Harv	Yield	Production	Harv	Yield	Production	Harv	Yield	Production
Big Horn	6,000	2.2	13,000						
Premont	19,000	2.5	47,400						
Hot Springs	7,000	1.9	13,200						
Park	5,000	2.8	14,000						
Washakie	3,000	2.5	7,400						
Other County				36,000	2.4	87,000	4,000	2.0	8,000
NW District	40,000	2.4	95,000	36,000	2.4	87,000	4,000	2.0	8,000
Campbell	13,000	1.5	19,200	1,000	2.2	2,200	12,000	1.4	17,000
Crook	25,000	1.6	40,100	500	2.2	1,100	24,500	1.6	39,000
Johnson	9,000	1.6	14,500						
Sheridan	20,000	2.0	39,700	8,000	2.4	19,200	12,000	1.7	20,500
Weston	8,000	1.4	11,500						
Other County				5,500	1.9	10,500	11,500	1.3	15,500
NE District	75,000	1.7	125,000	15,000	2.2	33,000	60,000	1.5	92,000
Lincoln	42,000	1.9	79,000	35,000	2.0	68,500	7,000	1.5	10,500
Sublette	100,000	1.1	108,500	82,000	1.2	96,500	18,000	0.7	12,000
Teton	12,000	2.1	25,100						
Uinta	46,000	2.0	92,400						
Other County				53,000	2.0	108,000	5,000	1.9	9,500
West District	200,000	1.5	305,000	170,000	1.6	273,000	30,000	1.1	32,000
Albany	87,000	1.5	132,600	80,000	1.5	120,000	7,000	1.8	12,600
Carbon	86,000	1.7	143,800						
Natrona	12,000	1.6	19,200						
Sweetwater	15,000	1.8	26,400						
Other County				105,000	1.7	179,000	8,000	1.3	10,400
SE District	200,000	1.6	322,000	185,000	1.6	299,000	15,000	1.5	23,000
Converse	11,000	1.8	20,000	10,000	1.9	19,000	1,000	1.0	1,000
Goheen	14,000	1.6	22,500	9,000	1.7	15,000	5,000	1.5	7,500
Laramie	36,000	1.4	49,500	21,000	1.5	31,500	15,000	1.2	18,000
Niobrara	23,000	1.0	23,500	4,000	1.1	4,500	19,000	1.0	19,000
Platte	31,000	1.5	45,500	20,000	1.9	38,000	11,000	0.7	7,500
SW District	115,000	1.4	161,000	64,000	1.7	108,000	51,000	1.0	53,000
Total	840,000	1.7	1,287,000	759,000	1.8	1,139,000	81,000	1.4	108,000

ALL HAY: ACREAGE, YIELD, AND PRODUCTION, BY COUNTY, WYOMING, 1998

County and District	Total			Irrigated			Non-Irrigated		
	Harv	Yield	Production	Harv	Yield	Production	Harv	Yield	Production
	Acres	Tons	Tons	Acres	Tons	Tons	Acres	Tons	Tons
Big Horn	31,000	3.9	119,700	30,900	3.9	119,500	100	2.0	200
Freemont	90,000	3.7	333,600	88,700	3.8	334,000	1,300	1.2	1,600
Hot Springs	20,000	2.1	42,300	18,600	2.2	40,500	1,400	1.3	1,800
Park	43,000	3.6	156,500	42,500	3.7	156,000	500	1.0	500
Washakie	16,000	3.7	59,900	15,300	3.9	59,000	700	1.3	900
NW District	200,000	3.6	714,000	196,000	3.6	709,000	4,000	1.3	5,000
Campbell	65,000	0.9	60,500	5,000	2.6	13,000	60,000	0.8	47,500
Crook	96,000	1.1	102,000	10,000	2.3	22,500	86,000	0.9	79,500
Johnson	35,000	2.4	82,500	28,000	2.7	76,500	7,000	0.9	6,000
Sheridan	61,000	1.9	115,000	30,000	2.8	84,000	31,000	1.0	31,000
Weston	33,000	1.4	47,000	8,000	2.5	20,000	25,000	1.1	27,000
NE District	290,000	1.4	407,000	81,000	2.7	216,000	209,000	0.9	191,000
Lincoln	77,000	1.7	134,500	54,100	2.0	107,000	22,900	1.2	27,500
Sublette	103,000	1.4	140,200	91,800	1.4	130,000	11,200	0.9	10,200
Teton	14,000	2.4	34,200	13,500	2.5	33,500	500	1.4	700
Uinta	46,000	2.0	91,600	38,600	2.0	78,500	7,400	1.8	13,100
West District	240,000	1.7	400,500	198,000	1.8	349,000	42,000	1.2	51,500
Albany	95,000	1.2	118,100	90,900	1.2	113,500	4,100	1.1	4,600
Carbon	87,000	1.9	168,500	83,500	2.0	166,000	3,500	0.7	2,500
Natrona	34,000	2.0	68,800	32,800	2.0	67,000	1,200	1.5	1,800
Sweetwater	24,000	2.2	53,600	22,800	2.3	52,500	1,200	0.9	1,100
SC District	240,000	1.7	409,000	230,000	1.7	399,000	10,000	1.0	10,000
Converse	35,000	1.8	63,000	28,500	2.1	59,000	6,500	0.6	4,000
Goshen	48,000	3.5	167,000	38,300	4.0	152,000	9,700	1.5	15,000
Laramie	60,000	2.3	135,000	41,000	2.7	111,000	19,000	1.3	24,000
Niobrara	34,000	1.5	49,500	9,000	3.0	27,000	25,000	0.9	22,500
Platte	43,000	2.3	100,000	38,200	2.5	96,000	4,800	0.8	4,000
SE District	220,000	2.3	514,500	155,000	2.9	445,000	65,000	1.1	69,500
STATES	1,358,000	2.1	2,445,600	868,000	2.5	2,118,000	458,000	1.0	527,600

ALL HAY: ACREAGE, YIELD, AND PRODUCTION, BY COUNTY, WYOMING, 1999

County and District	Total			Irrigated			Non-Irrigated		
	Harv	Yield	Production	Harv	Yield	Production	Harv	Yield	Production
	Acres	Tons	Tons	Acres	Tons	Tons	Acres	Tons	Tons
Big Horn	36,000	3.7	131,400	35,100	3.7	130,000	900	1.6	1,400
Freemont	89,000	3.6	324,800	88,300	3.7	324,000	700	1.1	800
Hot Springs	18,000	1.9	34,900	15,700	2.0	31,000	2,300	1.7	3,900
Park	42,000	3.3	139,500	41,100	3.4	138,000	900	1.7	1,500
Washakie	15,000	3.4	51,400	13,800	3.6	49,000	1,200	2.0	2,400
NW District	290,000	3.4	682,000	194,000	3.5	672,000	6,000	1.7	10,000
Campbell	72,000	1.4	98,200	5,000	2.7	13,200	69,000	1.3	90,000
Crook	104,000	1.7	180,600	8,500	2.3	19,600	95,500	1.7	161,000
Johnson	35,000	2.1	74,500	28,000	2.3	64,500	7,000	1.4	10,000
Sheridan	73,000	2.4	171,700	42,000	2.7	115,200	31,000	1.8	56,500
Weston	36,000	1.2	44,000	3,500	2.1	7,500	32,500	1.1	36,500
NE District	320,000	1.8	569,000	85,000	2.5	215,000	235,000	1.5	354,000
Lincoln	76,000	2.1	160,700	60,700	2.3	137,500	15,300	1.5	23,200
Sublette	106,000	1.1	120,600						
Teton	19,000	2.2	41,500						
Uinta	59,000	2.2	127,000	53,700	2.2	117,000	5,300	1.9	10,000
Other Cnty				105,600	1.4	148,500	19,400	0.7	13,600
West District	260,000	1.7	449,800	220,000	1.8	403,000	40,000	1.2	46,800
Albany	98,000	1.6	155,400	90,700	1.6	142,500	7,300	1.8	12,900
Carbon	102,000	1.8	178,600	95,700	1.8	170,500	6,300	1.3	8,100
Natrona	34,000	2.4	80,100	32,700	2.4	78,000	1,300	1.6	2,100
Sweetwater	26,000	2.2	56,100	24,900	2.2	55,000	1,100	1.0	1,100
SC District	260,000	1.8	470,200	244,000	1.8	446,000	16,000	1.5	24,200
Converse	39,000	2.3	88,400	35,000	2.4	85,000	4,000	0.9	3,400
Goshen	49,000	3.6	174,500	42,000	3.9	164,000	7,000	1.5	10,500
Laramie	61,000	2.2	135,000	42,000	2.7	112,500	19,000	1.2	22,500
Niobrara	44,000	1.8	80,000	14,000	3.0	42,500	30,000	1.3	37,500
Platte	57,000	2.5	141,100	44,000	3.0	130,000	13,000	0.9	11,100
SE District	250,000	2.5	619,000	177,000	3.0	534,000	73,000	1.2	85,000
STATES	1,200,000	2.2	2,790,600	878,000	2.5	2,077,000	272,000	1.3	413,600

PRICES



PRICES

The Wyoming **All Commodities Price Index** for 1999 continued to lag below base price levels for most of the year. In September, livestock prices pushed the Index to a high of 104 (1990-92=100), before settling back to 96 to end the year. The low for the year was 88 in May when both livestock and crop prices were slumping. The **All Livestock Index**, which drives the **All Commodities Index** in Wyoming, recovered slightly from the lows of 1998, but remained weak until the last quarter of the year. The Index hit a high of 105 in September and ended at an even 100 in December. The **All Crops Index** continued the decline that began in 1998. The year started out at the high of 97 then went gradually lower and ended at a low of 86 in December.

Beef Cattle prices gained strength late in the year. The average price for the year was \$71.70 per cwt., up \$7.10 from 1998 and \$1.00 higher than 1997. Prices rose to \$77.80 in September before ending at \$74.90 in December.

Combined **Steer and Heifer** prices grew stronger. The average price for the year was \$77.70 per cwt., up \$5.90 from 1998 and \$1.20 higher than 1997. From April through December monthly prices rose steadily and finished the year at \$87.10.

Calf prices rebounded sharply in the latter part of 1999. The average price for the year was \$95.40 per cwt., up \$10.50 from 1998 and \$6.50 higher than 1997. The low price for the year was \$83.80 per cwt. in January, and December saw the high at \$105.00.

Sheep prices averaged \$28.90 per cwt. in 1999, up 20 cents from 1998. Monthly prices ranged from \$25.10 to \$36.90 per cwt. in December. **Lamb** prices were up from 1998, but well below the record level reached in 1997. The marketing year average price was \$75.70 per cwt. up \$3.90 from 1998, but down \$18.60 from 1997. Prices hit a high of \$86.70 in June.

Wool prices were sharply lower. The marketing year average was 49 cents per pound compared with 77 cents in 1998 and 98 cents in 1997.

Hog prices started the marketing year at a remarkably low \$13.10 per cwt. in December 1998 before recovering somewhat. Prices finished the year in the low \$30's. The market year average price for hogs, at \$27.30 per cwt., was the lowest since 1972 when the average price was \$23.10.

Milk prices retreated from the record high monthly prices set in the last quarter of 1998. The marketing year average price for 1999 was \$13.00 per cwt., down 70 cents from 1998, but up 80 cents from 1997. The marketing year started at the peak price of \$16.00 per cwt. in January then dipped quickly lower before hitting a short-lived spike of \$15.10 in September.

Hay prices were sharply lower in 1999 and the lowest since 1991. The preliminary marketing year average price for all hay was \$66.00 per ton, compared with \$76.00 in 1998. The preliminary marketing year average price for **alfalfa**, at \$67.00 per ton, was down \$9.00 from 1998, and \$19.00 less than in 1997. The preliminary marketing year average price for **other hay** was \$60.50 per ton, down \$10.50 from 1998 and \$16.50 less than 1997.

Wheat prices continued to fall. The preliminary marketing year average price of \$2.20 was down 29 cents from 1998 and 90 cents less than 1997. The monthly average price for March at \$1.90 per bushel was the lowest since July 1977.

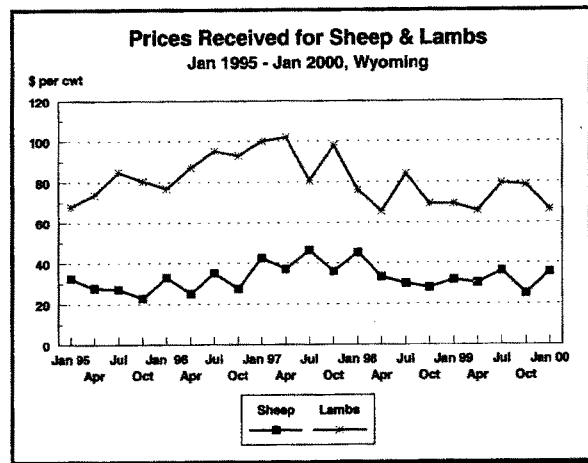
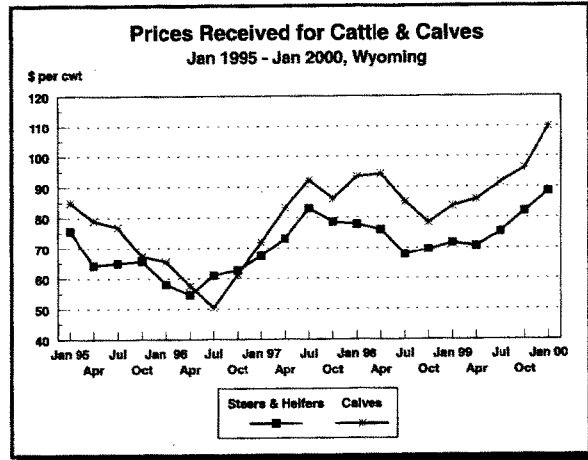
Corn prices were significantly lower in 1999. The preliminary marketing year average price was \$1.80 per bushel, down 20 cents from 1998 and 72 cents below 1997. The monthly price hit a low of \$1.68 in December, the lowest monthly average since April 1987.

Feed Barley prices improved slightly from the 1998 marketing year, but were still well below prior years. The monthly high for the year was \$2.00 per bushel in October while the low was \$1.40 in August.

Oats prices were weaker than in the 1998 marketing year, averaging \$1.50 per bushel in 1999, down 20 cents. The monthly high was \$1.81 per bushel in January, and the low was \$1.10 in September.

Dry Bean prices remained at the low 1998 levels. The preliminary marketing year average price was \$16.50 per cwt., unchanged from 1998, but down \$3.10 from 1997. Prices stagnated at \$14-\$15 from January-May 2000.

The 1999 **Prices Paid Index** for the U.S. was virtually unchanged from 1998. Prices paid by farmers and ranchers in the Mountain region on April 1, 2000 were sharply higher than a year earlier for gasoline and other fuel. Prices for fertilizer and feed were slightly lower.



**AVERAGE PRICES RECEIVED BY FARMERS AND RANCHERS:
BY MARKETING YEAR AND MONTHS, WYOMING 1995-99, U.S. 1999**

BEEF CATTLE 1 ¹ : Dollars per cwt.													
1995	70.40	69.40	66.70	62.40	60.50	60.40	58.10	63.30	62.90	61.40	53.80	54.80	62.40
1996	54.50	52.60	53.50	50.80	50.90	48.90	58.70	61.10	60.60	56.40	55.00	55.00	56.50
1997	59.60	64.90	67.40	70.20	73.00	69.20	78.00	78.50	75.90	71.20	69.60	65.30	70.70
1998	68.60	69.20	69.70	71.90	68.10	63.90	54.50	62.90	63.40	66.50	60.20	55.80	64.60
1999	63.40	72.80	70.00	67.20	65.10	69.00	66.00	72.60	77.80	74.30	71.20	74.90	71.70
U.S.													
1999	59.00	60.60	62.40	62.70	62.10	63.70	62.60	63.50	63.80	66.20	66.20	66.60	63.40
COWS: Dollars per cwt.													
1995	44.50	44.80	44.50	41.10	41.40	42.10	40.30	37.50	35.60	35.60	34.10	34.60	37.90
1996	36.30	36.60	36.90	32.30	32.80	35.20	35.70	36.00	34.40	31.80	31.20	30.40	33.30
1997	33.50	37.40	42.40	41.20	41.40	40.00	41.20	40.00	35.60	35.00	32.50	32.80	36.20
1998	35.80	37.00	38.60	38.50	38.20	38.40	36.70	35.50	32.50	31.40	31.90	33.10	34.80
1999	35.60	38.80	40.20	38.70	38.70	40.00	42.00	38.30	38.30	37.60	37.80	38.40	38.30
U.S.													
1999	33.40	34.70	35.20	35.10	36.40	36.70	37.70	36.30	34.60	33.80	33.60	35.10	35.10
STEERS AND HEIFERS: Dollars per cwt.													
1995	75.70	72.70	68.60	64.30	63.30	65.30	65.00	64.70	65.30	65.60	63.50	63.90	67.10
1996	58.00	55.70	55.50	54.60	56.00	58.00	61.00	61.90	62.90	62.60	62.90	64.60	60.50
1997	67.40	69.70	71.80	73.10	75.00	78.40	83.00	81.00	78.90	78.60	80.00	79.90	76.50
1998	77.80	77.80	73.90	76.00	76.10	73.30	67.90	65.00	65.40	69.50	71.70	71.00	71.80
1999	71.70	75.40	72.90	70.70	73.40	74.50	75.40	76.00	79.40	82.10	86.20	87.10	77.70
U.S.													
1999	62.20	63.60	65.50	66.00	65.20	66.70	65.20	66.20	67.10	70.10	70.90	70.80	66.90
CALVES: Dollars per cwt.													
1995	84.90	88.20	81.80	79.00	76.50	76.80	76.90	67.20	67.60	67.20	66.60	67.00	70.20
1996	65.50	63.50	60.00	57.50	58.60	56.80	50.40	62.10	64.80	61.20	63.30	68.10	62.70
1997	71.90	77.70	80.30	83.20	84.50	93.70	92.20	97.80	91.40	86.20	85.60	87.20	88.90
1998	93.40	92.20	93.90	94.30	91.00	85.20	83.30	78.00	78.40	78.90	79.70	84.90	84.90
1999	83.80	91.90	91.10	86.00	85.10	90.10	91.60	92.90	95.50	96.20	95.90	105.00	95.40
U.S.													
1999	83.20	86.90	87.30	88.20	87.60	89.00	89.20	89.60	90.90	91.90	93.00	98.60	87.70
SHEEP: Dollars per cwt.													
1995	32.50	36.70	28.30	27.80	26.50	28.30	27.30	29.00	26.20	22.80	24.70	25.90	25.90
1996	33.00	30.40	34.30	25.10	21.80	26.30	35.10	30.90	29.50	27.50	29.90	37.50	29.40
1997	42.50	40.50	42.10	37.00	29.60	37.00	46.20	40.30	33.40	35.90	43.90	42.20	38.70
1998	45.10	42.90	43.90	33.20	27.70	31.00	30.00	25.90	25.70	28.00	26.40	29.70	28.70
1999	31.80	31.00	32.80	30.30	30.70	30.70	36.20	29.20	29.60	25.10	31.80	36.90	28.90
U.S.													
1999	32.40	30.20	32.70	31.80	31.50	28.90	32.00	29.80	29.20	26.40	30.20	33.40	31.10
LAMBS: Dollars per cwt.													
1995	67.90	69.50	75.10	73.70	84.40	87.40	84.90	84.90	85.30	80.40	82.30	79.20	80.20
1996	76.80	85.20	89.00	87.10	91.00	94.80	95.10	95.10	93.50	92.90	89.10	87.30	90.20
1997	100.00	99.40	101.00	102.00	87.70	87.90	80.70	94.10	99.90	98.00	90.80	92.40	94.30
1998	76.00	73.50	70.30	65.60	61.30	92.00	84.00	80.10	71.50	69.30	63.00	66.10	71.80
1999	69.40	66.90	67.40	65.90	85.10	86.70	79.50	81.10	77.20	78.60	78.60	78.00	75.70
U.S.													
1999	68.20	67.20	67.40	67.40	82.80	81.30	77.00	80.30	75.30	72.60	76.30	77.60	74.50
ALL MILK SOLD TO PLANTS: Dollars per cwt.													
1995	10.70	10.70	10.90	10.80	10.70	10.20	10.20	9.90	10.90	11.80	12.40	12.40	11.10
1996	13.40	13.20	13.20	13.30	13.30	13.50	13.20	14.40	14.60	14.50	13.30	12.70	13.30
1997	12.40	12.70	12.70	12.30	11.40	11.00	11.00	11.80	12.70	12.70	13.50	12.20	12.20
1998	13.20	13.40	12.70	12.20	11.20	11.90	12.70	13.90	14.30	15.90	16.20	16.90	13.70
1999	16.90	16.00	13.20	11.50	11.40	11.50	11.30	12.30	13.90	15.10	13.80	12.10	13.00
U.S.													
1999	17.40	15.20	15.20	12.60	12.70	13.10	13.80	15.10	15.70	14.90	14.40	12.20	14.38
HOGS: Dollars per cwt.													
1995	30.10	34.40	37.40	36.70	34.30	33.60	36.30	40.60	42.90	43.50	43.00	37.90	40.40
1996	38.90	38.70	43.30	45.30	46.60	55.10	53.60	54.70	57.70	52.00	53.40	53.70	50.10
1997	53.10	51.30	50.90	46.40	52.40	57.50	53.90	54.70	53.00	47.20	43.60	41.90	50.60
1998	40.80	34.70	32.70	32.30	32.30	37.40	38.30	31.20	31.50	26.90	26.60	19.00	31.10
1999	13.10	26.40	25.90	23.60	26.70	35.70	32.90	27.50	31.30	29.20	31.30	33.20	27.30
U.S.													
1999	15.00	26.50	27.70	28.00	30.10	36.60	34.10	31.60	36.20	33.90	34.20	33.40	30.30

¹/Cows and "Steers and Heifers" combined with allowance where necessary for slaughter bulls.

**AVERAGE PRICES RECEIVED BY FARMERS AND RANCHERS:
BY MARKETING YEAR AND MONTHS, WYOMING 1995-99, U.S. 1999**

Marketing Year	Current					Following					Mo. Yr.		
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May			
ALL WHEAT: Dollars per bushel													
1995	4.26	4.16	4.37	4.45	4.60	4.49	4.52	4.98	5.17	5.73	6.25	5.89	4.60
1996	4.43	4.14	3.96	3.95	3.91	4.05	3.91	4.03	4.02	4.16	4.08	3.68	4.00
1997	3.44	3.24	3.19	3.24	3.20	3.13	2.98	2.98	3.05	2.95	2.82	2.69	3.10
1998	2.38	2.15	2.14	2.54	2.66	2.65	2.78	2.40	2.52	2.71	2.41	2.41	2.40
1999	2.08	2.32	2.32	1.95	2.10	1.98	2.10	2.10	1.90	2.23	2.24		2.20 1/
U.S.													
1999	2.23	2.52	2.57	2.58	2.66	2.52	2.50	2.54	2.59	2.57	2.59		2.55 2/
FEED BARLEY: Dollars per bushel													
1995	2.40	2.29	2.24	2.43	2.66	2.76	2.82	2.88	2.89	2.88	3.24	3.36	2.40
1996	3.30	3.06	2.77	2.83	2.85	2.78	2.76	2.50	2.75	2.59	2.46	2.32	2.78
1997	2.15	1.94	2.20	1.92	1.92	2.04	2.07	2.00	2.11	1.90	1.92	2.10	1.99
1998	1.69	1.65	1.81	1.44	1.63	1.68	1.75	1.70	1.87	1.50	1.74	1.48	1.49
1999	1.44	1.40	1.47	2.00	1.45	1.54	1.46	1.66	1.70	1.89	1.78		1.60 1/
U.S.													
1999	1.48	1.51	1.64	1.61	1.63	1.64	1.64	1.68	1.78	1.68	1.93		1.45 2/
ALL BARLEY (includes malting barley when marketed): Dollars per bushel													
1995	2.40	3.00	2.79	2.89	3.06	3.15	2.82	3.24	3.25	2.88	3.24	3.36	2.98
1996	3.12	3.36	3.33	3.37	3.28	3.51	2.99	3.35	3.48	2.59	2.46	2.32	3.33
1997	3.29	3.32	3.39	3.37	3.09	3.40	3.12	2.94	2.94	2.79	1.92	2.10	3.32
1998	3.18	3.25	3.21	1.54	2.80	2.77	2.75	2.58	2.58	2.19	2.24	1.48	2.63
1999	3.19	3.12	2.90	2.84	2.64	1.54	2.42	1.66	2.77	2.38	1.78		3.05 1/
U.S.													
1999	2.04	2.37	2.03	1.96	2.15	2.24	2.05	2.13	2.23	2.09	2.12		2.05 2/
OATS: Dollars per bushel													
1995	1.85	1.60	1.65	1.97	1.92	1.86	2.00	2.06	2.10	2.17	2.20	2.20	1.85
1996	2.20	1.94	1.95	1.93	2.03	2.09	2.17	2.08	2.00	1.95	2.09	2.05	2.00
1997	1.90	1.92	1.92	1.93	1.85	2.05	1.79	1.92	1.84	1.76	1.92	1.60	1.86
1998	1.71	1.59	1.61	2.00	1.90	1.45	1.66	1.58	1.60	1.92	1.70	1.83	1.70
1999	1.32	1.28	1.10	1.60	1.66	1.71	1.81	1.52	1.20	1.62	1.52		1.50 1/
U.S.													
1999	1.08	.97	1.08	1.07	1.11	1.17	1.20	1.27	1.28	1.35	1.32		1.10 2/
ALL HAY (Baled): Dollars per ton													
1995	82.00	76.00	74.00	70.00	71.00	69.00	70.00	69.00	68.00	66.00	63.00	62.00	71.50
1996	64.00	68.00	70.00	72.00	73.00	73.00	77.00	82.00	89.00	94.00	94.00	94.00	76.50
1997	85.00	81.00	83.00	87.00	87.00	87.00	87.00	87.00	86.00	84.00	76.00	77.00	85.00
1998	79.00	79.00	78.00	78.00	78.00	76.00	76.00	73.00	73.00	70.00	69.00	69.00	76.00
1999	68.00	67.00	68.00	67.00	67.00	65.00	64.00	64.00	64.00	63.00	62.00	62.00	66.00 1/
U.S.													
1999	81.70	78.40	77.49	74.50	73.70	74.00	71.10	71.80	72.60	74.80	86.70	89.40	77.00 2/
ALFALFA HAY (Baled): Dollars per ton													
1995	82.00	76.00	74.00	71.00	71.00	70.00	70.00	69.00	68.00	67.00	65.00	63.00	72.00
1996	64.00	68.00	72.00	74.00	74.00	74.00	78.00	83.00	90.00	95.00	95.00	95.00	77.50
1997	85.00	81.00	84.00	87.00	87.00	88.00	87.00	87.00	86.00	85.00	78.00	78.00	86.00
1998	79.00	79.00	79.00	79.00	78.00	76.00	76.00	74.00	74.00	70.00	69.00	69.00	76.00
1999	69.00	68.00	69.00	68.00	68.00	66.00	65.00	65.00	66.00	64.00	64.00	64.00	67.00 1/
U.S.													
1999	85.00	82.00	81.50	77.30	76.00	77.30	73.20	74.10	77.40	78.00	84.50	93.90	80.00 2/
OTHER HAY (Baled): Dollars per ton													
1995	78.00	71.00	70.00	66.00	66.00	64.00	64.00	64.00	62.00	62.00	60.00	58.00	66.00
1996	60.00	63.00	64.00	67.00	67.00	67.00	70.00	74.00	80.00	85.00	85.00	85.00	69.50
1997	78.00	74.00	77.00	80.00	80.00	80.00	80.00	80.00	80.00	79.00	71.00	71.00	77.00
1998	73.00	74.00	74.00	74.00	73.00	71.00	71.00	67.00	67.00	64.00	64.00	65.00	71.00
1999	63.00	62.00	62.00	62.00	62.00	60.00	59.00	57.00	58.00	58.00	58.00	58.00	60.50 1/
U.S.													
1999	68.50	65.30	62.80	63.70	64.70	64.80	65.90	65.90	66.70	66.70	67.40	71.30	66.30 2/

1/1999 marketing year average price is preliminary.

2/ U.S. prices are preliminary.

95
P
r
i
n
t

**AVERAGE PRICES RECEIVED BY FARMERS AND RANCHERS:
BY MARKETING YEAR AND MONTHS, WYOMING 1995-99, U.S. 1999**

Mkt Yr	Current				Following												1999 Yr Avg
	Oct	Nov	Dec		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep				
CORN: Dollars per bushel																	
1995	3.41	3.17	3.40	3.36	3.38	3.55	4.20	4.60	4.88	4.89	4.80	4.62	3.90				
1996	3.60	3.14	2.74	2.79	2.73	2.74	2.89	2.87	2.67	2.18	2.53	2.45	2.90				
1997	2.73	2.54	2.63	2.62	2.69	2.69	2.72	2.70	2.52	2.19	2.27	1.81	2.52				
1998	1.96	2.20	1.96	1.98	1.96	1.92	2.23	1.93	1.93	1.83	1.84	1.96	2.00				
1999	1.76	1.73	1.68	1.87	1.98	2.18	2.15	2.18					1.80	1/			
U.S.																	
1999	1.69	1.70	1.82	1.90	1.98	2.03	2.03	2.10					1.90	2/			
Mkt Yr	Current				Following												1999 Yr Avg
	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov		
DRY EDIBLE BEANS: Dollars per cwt.																	
1995	18.20	17.20	17.20	15.70	17.60	17.20	19.90	20.70	25.90	26.30	26.90	25.00	21.10				
1996	26.30	23.80	22.00	20.80	22.10	20.30	19.40	19.40	19.90	19.80	19.50	18.20	22.00				
1997	18.30	15.50	18.20	19.70	21.20	21.50	21.20	21.70	22.00	23.80	20.00	19.80	19.60				
1998	18.90	16.90	16.60	17.30	15.70	15.90	15.30	15.60	15.00	16.50	15.30	16.00	16.50				
1999	18.90	17.70	17.50	15.90	14.70	15.50	14.30	14.70	16.50				16.50	1/			
U.S.																	
1999	18.10	17.20	17.30	17.00	16.70	16.00	15.20	16.60	17.00				17.60	2/			

1/1999 marketing year average price is preliminary.
2/U.S. prices are preliminary.

**INDEX NUMBERS OF PRICES RECEIVED BY FARMERS AND RANCHERS: BY MONTHS,
WYOMING 1995-99, U.S. 1998-99, (1990-92=100)**

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
ALL LIVESTOCK AND PRODUCTS												
1995	92	91	88	83	81	82	79	87	87	83	72	74
1996	74	71	73	69	70	71	82	87	85	80	73	75
1997	82	87	91	94	97	94	104	108	106	100	93	89
1998	92	92	93	95	90	88	76	88	87	90	80	76
1999	85	95	92	88	87	92	88	98	105	102	95	100
U.S.												
1998	95	94	95	95	96	98	96	99	98	98	97	97
1999	96	94	95	90	93	95	94	97	98	96	98	95
ALL CROPS												
1995	111	108	105	105	104	105	99	97	106	108	107	107
1996	118	120	118	122	134	131	112	107	123	120	117	117
1997	117	116	117	116	114	108	106	103	112	111	113	113
1998	111	109	110	107	107	105	102	98	102	100	101	100
1999	97	94	95	96	93	94	93	93	96	92	90	87
U.S.												
1998	109	109	111	114	112	106	107	103	101	100	101	100
1999	97	98	98	103	104	100	95	99	95	88	89	90
ALL COMMODITIES												
1995	97	95	92	88	86	89	87	91	90	86	78	82
1996	86	81	82	81	83	90	93	95	91	84	81	85
1997	92	93	97	99	100	99	105	105	107	101	96	95
1998	98	96	96	98	94	94	86	92	90	91	84	82
1999	89	95	93	90	88	93	90	96	104	101	94	96
U.S.												
1998	103	101	102	104	103	102	102	101	99	99	99	98
1999	97	96	96	96	98	97	95	98	96	91	93	92

**AVERAGE PRICES PAID BY FARMERS AND RANCHERS:
SPECIFIED COMMODITIES AND MONTHS, MOUNTAIN REGION 1/, APRIL 1, 1996-2000**

Commodity	1996	1997	1998	1999	2000
Dollars					
Alfalfa Meal, per 100 Pounds	12.30	13.50	14.20	11.20	10.90
Beef Cattle Concentrate, 32-36% Protein, per Ton	326.00	321.00	282.00	261.00	259.00
Brass, per 100 Pounds	13.40	14.90	14.10	14.00	13.50
Corn Meal, per 100 Pounds	11.50	10.30	10.90	10.40	10.20
Cracked Corn, 41% Protein, per 100 Pounds	18.40	18.50	18.80	16.50	16.10
Dairy Feed, 14% Protein, per Ton	247.00	238.00	209.00	179.00	191.00
Diesel Fuel, Bulk, per Gallon	.89	.94	.77	.76	1.11
Gasoline, Unleaded Bulk, per Gallon	1.29	1.34	1.17	1.20	1.60
Gasoline, Unleaded Service Station, per Gallon	1.27	1.32	1.16	1.19	1.61
L. P. Gas, Bulk, per Gallon	.76	.81	.72	.66	.89
Dollars per Ton					
Fertilizer					
10-34-0	257.00	263.00	270.00	258.00	254.00
16-20-0	232.00	216.00	215.00	208.00	196.00
18-46-0	303.00	289.00	283.00	273.00	248.00
Sulfate of Ammonia	192.00	197.00	196.00	177.00	175.00
Ammonium Nitrate	229.00	233.00	199.00	178.00	180.00
Anhydrous Ammonia	319.00	313.00	261.00	218.00	234.00

1/Includes Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, and Wyoming for fuel and feed supplies; includes Colorado, Montana, New Mexico, and Wyoming for fertilizer.

**INDEX OF PRICES PAID BY FARMERS & RANCHERS
U.S. 1995-99 (1990-92=100)**

Index Category	1995	1996	1997	1998	1999
Production Items	108	115	119	113	112
Interest	102	106	105	104	106
Taxes	109	112	115	119	120
Wage Rates	114	117	123	129	135
Production Items, Interest, Taxes, and Wage Rates	108	115	118	114	113
Commodities & Services, Interest, Taxes, and Wage Rates 1/	109	115	118	115	115

1/Includes farm production items, interest, farm real estate taxes, farm wage rates, and consumer price index.



College of Agriculture
Agricultural Experiment Station

College of Agriculture 2000

PO Box 3354
Laramie WY 82071-3354
phone: 307.766.3667
fax: 307.766.3379
e-mail: ses@uwyo.edu
www.uwyo.edu/ag/agexpstn/exphone.htm

The University of Wyoming College of Agriculture provides education and information based on research to address the needs of students, Wyoming citizens, firms, communities, and the global scientific community. To fulfill this mission, the college focuses on research, educational, and extension programs designed to enhance understanding of the world in which we live and to deliver practical information needed to improve life's choices.

Given the significance of agriculture to the sustainability of natural resources and the well-being of communities and individuals, citizens have a stake in the direction chosen and the accomplishments achieved by colleges of agriculture. Individuals, families, and communities need relevant research and education partnerships to deal with issues affecting them. The college has been active in a number of endeavors to assist the public.

Research and extension/outreach efforts extend beyond the campus. Research projects are conducted at four Research and Extension Centers with individual cooperators across the state. Please stop in to view the research being conducted or contact any of the Centers:

Archer Research and Extension Center	307-632-7905
Powell Research and Extension Center	307-754-2223
Sheridan Research and Extension Center	307-737-2415
Torrington Research and Extension Center	307-532-7126

Educational programs are offered to off-campus students and clientele by UW Cooperative Extension Service (CES), which has offices in all 23 Wyoming counties and the Wind River Indian Reservation. Education programs are issue oriented and include agriculture production, integrated resource management, water quality, community and business development, food safety, nutrition and health, financial management, and 4-H and youth-at-risk education.

Imagine spending the summer interacting with friendly, hard-working people while getting the satisfaction of helping them produce quality crops with increased value. UW's Seed Certification Service mission is to help Wyoming's seed industry produce high-quality seed crops. By completing an application for certification, growers agree to allow the program's inspectors to walk their fields to ensure crops meet standards for varietal purity, problem weeds, and seed-borne diseases. If you are interested in growing certified seed please call (307-754-9815).

Land managers often say "the only good grasshopper is a dead one." But, grasshoppers contribute more to the ecosystem than their bad reputation lead us to believe. The Internet site Grasshoppers of Wyoming and the West (<http://www.sdvc.uwyo.edu/grasshopper/>), which was developed by Department of Renewable Resources faculty and staff, contains good, bad, and

The University of Wyoming is an equal opportunity/affirmative action institution.

ugly grasshopper facts and photos and is the only website that concentrates on ecological, biological, taxonomical, and managerial information on grasshoppers affecting the western United States. It provides information by county and state, so pest managers can optimize their allocations to do the most good with limited resources. The Grasshopper Site has received hundreds of requests from 57 countries.

The Department of Veterinary Sciences test and record Wyoming rabies cases. Using this information, they generate monthly and yearly maps on positive cases within each county of the state. According to their records, the Riverton and Lander areas, previously free of rabies, are reporting positive cases that may result in higher incidents between wild and domestic animals. Rabies constantly circulates in the Wyoming skunk population, which is considered a virus reservoir. Since Lander and Riverton communities have not had rabies problems, animal owners may have fallen behind on vaccinating their animals.

The Dietetics Program is an option in the Department of Family and Consumer Sciences' nutrition discipline. The American Dietetic Association (ADA) approved the science-based core dietetics classes, and every 10 years the program is evaluated to maintain its currency with ADA standards. After completing the dietetic B.S. degree and an ADA accredited dietetic internship, graduates of the program must pass the ADA examination to become registered dietitians. Students enter the program for various reasons. High on the list is personal concern. Many of the students want to know the truth about the myths and hype behind diets. The dietetics program teaches them to distinguish between knowledgeable, credible sources and glitz. This program also prepares graduates to help people in making wise nutritional choices.

The establishment of Freshman Interest Groups (FIGs) by the University of Wyoming two years ago has resulted in higher student retention rates. The College of Agriculture has been among the major players. FIGs are a type of learning community for freshman students. Freshmen with shared interests, or the same majors, choose to enroll in a subject-related FIG such as the Pre-Veterinary FIG for pre-vet majors. As members of the FIG, they enroll in common core courses and live in proximity of one another in the residence halls. These course and living arrangements facilitate interaction among students with shared interests and goals and provide natural avenues for support and study groups. Another College of Agriculture FIG related to the theme of "Feeding the World", emphasized the study of sustainable agricultural systems. Students have been very satisfied with this new program, as it has helped them see the connections between their academic pursuits and professional and personal goals.

The College of Agriculture is constantly seeking students who will provide future leadership for the food and fiber industry and serve as good stewards of our natural resources. The college offers several programs that provide students with hands-on experiences. Active participation in research supported by the Paul Stock Foundation and internships with industry and state and federal agencies offer students first-hand job experience prior to graduation. For additional information about the college's research, education, and extension programs, please contact any of the college's seven departments:

Department of Agricultural and Applied Economics	307-766-2386
Department of Animal Science	307-766-2224
Department of Family and Consumer Sciences	307-766-4145
Department of Molecular Biology	307-766-3300
Department of Plant Sciences	307-766-3103
Department of Renewable Resources	307-766-2263
Department of Veterinary Sciences	307-742-6638

OR browse the college's programs at: <http://www.uwyo.edu/agcollege>



**WYOMING AGRICULTURAL STATISTICS SERVICE REPORTS
ISSUED DURING THE YEAR**

	<u>Frequency</u>	<u>Approximate Date of Publication</u>
GENERAL REPORTS:		
Crop Weather	Weekly	April-October (Mondays)
"Range Review" - Summary of latest results	Monthly	1st-18th
"Wyoming Agricultural Statistics" - Annual summary	Annual	July
REPORT DATES FOR CROPS: 1/		
Winter Wheat Seedings	Annual	January (9th-12th)
Prospective Plantings	Annual	March (28th-31st)
Acreage Planted	Annual	June (28th-30th)
Crop Production Forecasts	Monthly	May-November (9th-12th)
Dry Edible Bean Acreage by Class	Annual	August (9th-12th)
Dry Edible Bean Production by Class	Annual	December (9th-12th)
Summary of Crop Production	Annual	January (9th-12th)
Value of Crop Production	Annual	February (9th-12th)
Wheat Varieties	Annual	March
Barley Varieties	Annual	July
Hay Stocks	Semi-Annual	May, December (9th-12th)
REPORT DATES FOR LIVESTOCK, DAIRY, POULTRY, AND LIVESTOCK PRODUCTS: 1/		
Cattle Inventory and Calf Crop	Semi-Annual	January or February (5th Friday of year), and July (3rd Friday)
Sheep Inventory and Lamb Crop	Semi-Annual	January or February (5th Friday of year), and July (3rd Friday)
Sheep Shorn and Wool Production	Annual	January or February (5th Friday of year)
Sheep and Lamb Loss	Annual	February (3rd Friday)
Hog Inventory and Pig Crop	Annual	December (last Friday of year)
Livestock Slaughter	Monthly	20th-26th
Meat Animals - Production, Disposition, and Income	Annual	mid- to late- April
Milk Cows and Milk Production	Quarterly	January, April, July, October (13th-16th)
Bee Colonies and Honey Production	Annual	mid- to late- February
COUNTY ESTIMATES: 1/		
Wheat, Oats, and Barley	Annual	February
Corn	Annual	March
Hay - Alfalfa, and Other	Annual	March
Sugarbeets and Dry Beans	Annual	June
Livestock - Cattle and Breeding Sheep	Annual	April
All Crops, Cattle, and Sheep	Annual	In "Wyoming Agricultural Statistics"
PRICES AND MISCELLANEOUS: 1/		
Farm Labor	Quarterly	February, May, August, and November (15th-21st)
Agricultural Prices	Monthly	End of month
County Ag Values and Receipts	Annual	mid-August
Number of Farms and Land in Farms	Annual	February (19th-18th)
Farm Production Expenditures	Annual	July
Agricultural Land Values	Annual	March

1/Same day news releases are issued for most reports. Summaries of these reports will appear in the next issue of the "Range Review". Separate reports are also printed for Sheep Loss, Wheat Varieties, and Barley Varieties. The annual book, "Wyoming Agricultural Statistics", is a summary of all data for the previous year.



SUBSCRIPTION FORM

PO Box 1148
Cheyenne WY 82003
1-800-592-1660
www.nass.usda.gov/ny
National Agricultural Statistics Service, USDA

✓ Check those reports you wish to order. Follow the appropriate mailing instructions.

- 835 () **WYOMING AGRICULTURAL STATISTICS** *FREE TO EVERYONE**
Annual Bulletin containing all State and County statistics for the previous year. Issued in August.
(Printing paid for by Wyoming Department of Agriculture and University of Wyoming, College of Agriculture).
- 800 () **RANGE REVIEW - \$10.00/yr.** *FREE TO FARMERS/RANCHERS & OTHER RESPONDENTS*
Monthly summary of the latest crop, livestock, and price statistics as well as special items of current interest. Includes county data for major crops and livestock when released. Twelve issues.
- 840 () **CROP-WEATHER REPORT - \$12.00/yr.** *FREE TO FARMERS/RANCHERS & OTHER RESPONDENTS*
Crop and weather information for the previous week or month, including planting and harvesting progress, crop condition and development, and pasture and livestock conditions. Issued weekly April - October and monthly November - March.
- 830 () **SHEEP AND LAMB LOSS** *FREE TO EVERYONE**
Number and value of sheep and lamb losses to predators and other causes. Issued in February.
- 805 () **WINTER WHEAT VARIETIES** *FREE TO EVERYONE**
Acreage of varieties seeded by area of the State. Issued in March.
- 810 () **BARLEY VARIETIES - \$5.00/yr.** *FREE TO FARMERS/RANCHERS & OTHER RESPONDENTS*
Acreage of varieties seeded by area of the State. Issued in July.

*Funded by Wyoming Dept. of Agriculture

INTERNET: World Wide Web: <http://www.usda.gov/nass/ny> OR Gopher/Teletext/FTP: <HOST=usda.mannlib.cornell.edu>
BULLETIN BOARD: Call-ERS/NASS (supports modem speeds up to 14,400 baud (B.N.I.) on 1-800-821-6229 or 1-202-219-0378
AUTOFAX: From the touch-tone phone connected to your fax machine call 1-202-690-3944. Voice prompts will guide you.
DISKETTES: Most products are in Lotus 1-2-3 spreadsheet format. A listing of diskette products can be found in the ERS-NASS Products and Services catalog issued in December. To purchase diskettes please call our order desk at 1-800-999-6779.

WYOMING (56)

If you are a farmer/rancher or other survey respondent, OR only ordering reports for which there is no fee, remove form and fold reverse side so the following address shows and return to:

If you are not a farmer/rancher or respondent and are ordering any reports which require a subscription fee, make check/money order payable to USDA/NASS. Remove this form and mail with fee in an envelope with proper postage to:

Wyoming Agricultural Statistics Service
PO Box 1148
Cheyenne, Wyoming 82003

Classification (Please check one): ☐ Farmer/Rancher ☐ Media ☐ Agri-business ☐ Education ☐ Other (specify): _____

COMPANY OR INDIVIDUAL NAME _____
ADDITIONAL NAME OR ATTN: LINE _____
STREET, BOX #, ETC. _____
CITY, STATE, ZIP _____

Wyoming Agricultural Statistics Service
PO Box 1148
Cheyenne, WY 82003-1148

Wyoming Agricultural Statistics Service
PO Box 1148
Cheyenne, WY 82003-1148



WHERE TO FIND HISTORICAL COUNTY ESTIMATES

County estimates for crops are first published in the Wyoming Agricultural Statistics bulletin for the year following that crop year. Livestock county estimates have a January 1 reference date and are first published later that same year. Estimates are subsequently open for revision a year later as part of the annual review process. Revised estimates would be published in the following year's bulletin. Also, at 5-year intervals historical revisions are considered in conjunction with the publication of Census of Agriculture results. Thus, it is possible that as many as three different sets of estimates could be published over time for one commodity and year.

The tables below can be used to determine which bulletin contains the latest county statistics for any year. To use the tables, locate the commodity and year in which you are interested in the body of the table. The year at the top of the corresponding column is the year of the bulletin containing the latest county estimates for that commodity and year. Estimates for some earlier years not in the table are also available by request. If you have any questions, please call us at 1-800-892-1660.

COUNTY AGRICULTURAL STATISTICS PUBLICATION REFERENCE

Crops		1973	1978	1981	1985	1990	1991	1995	1999	2000
Wheat, by Type	1960-64	1965-70	1971-74	1975-78	1979-83	1984-88	1989-90	1991-92	1993-97	1998-99
Barley	1960-64	1965-70	1971-74	1975-78	1979-83	1984-88	1989-90	1991-92	1993-97	1998-99
Oats	1960-64	1965-70	1971-74	1975-78	1979-83	1984-88	1989-90	1991-92	1993-97	1998-99
Corn	1960-64	1965-70	1971-74	1975-78	1979-83	1984-88	1989-90	1991-92	1993-97	1998-99
Sugarbeets	1960-64	1965-70	1971-74	1975-78	1979-83	1984-88	1989-90	1991-92	1993-97	1998-99
Dry Beans	1960-64	1965-70	1971-74	1975-78	1979-83	1984-88	1989-90	1991-92	1993-97	1998-99
Hay, by type	1960-64	1965-70	1971-74	1975-78	1979-83	1984-88	1989-90	1991-92	1993-97	1998-99

* Wyoming Crop Statistics, 1960-68.

Livestock	1973	1978	1978	1981	1985	1990	1995	2000
All Cattle	1964-72	1973	1974-76	1977-80	1981-85	1986-88	1989-93	1994-2000
Beef Cows	1964-72	1973	1974-76	1977-80	1981-85	1986-88	1989-93	1994-2000
Milk Cows	1964-72	1973	1974-76	1977-80	1981-85	1986-88	1989-93	1994-2000
Breeding Sheep	1964-72	1973	1974-76	1977-80	1981-85	1986-88	1989-93	1994-2000
All Hogs	1963-70	1971		1972-76				

Senator ENZI. Mr. Bukowsky.

**STATEMENT OF AL BUKOWSKY, OWNER/OPERATOR, SOLITUDE
RIVER TRIPS, SALMON, IDAHO**

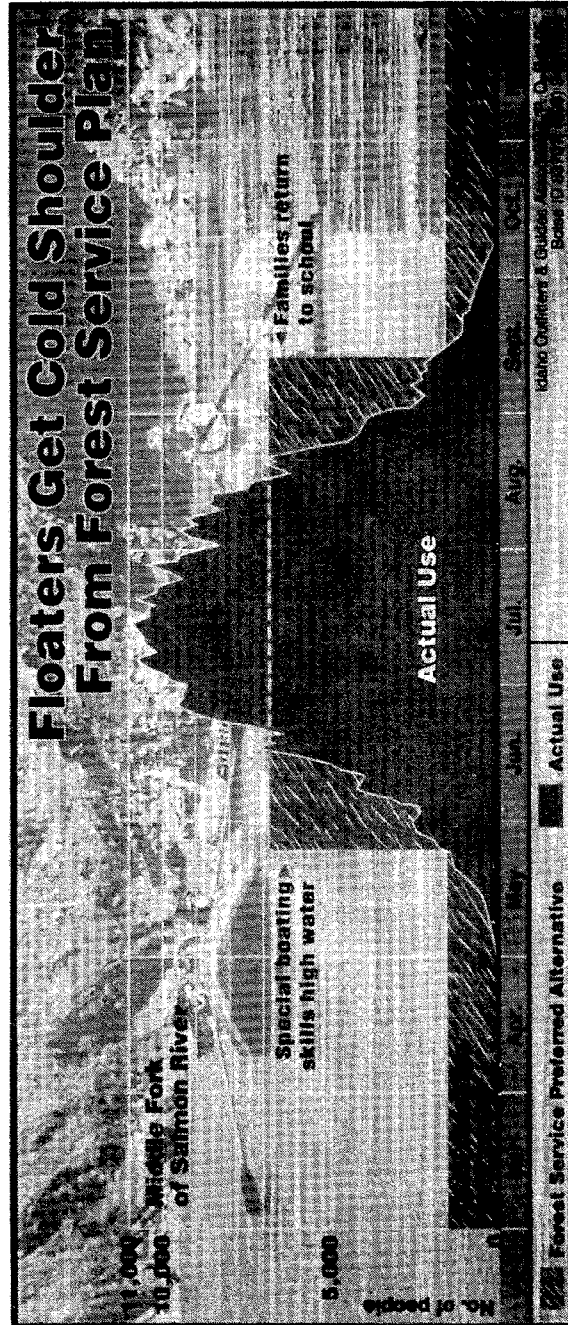
Mr. BUKOWSKY. Mr. Chairman, I appreciate this opportunity to testify before the Committee. The management of Federal forest lands and forest uses is undoubtedly the single most significant factor in the economies of the rural communities in which my family and our employees live, so we are particularly grateful that congressional attention is being focussed on our relationship with the Forest Service.

My name is Al Bukowsky. Along with my wife Jeana, we own and operate Solitude River Trips, a small outfitting and guiding business that has operated since the mid-1970s on the Middle Fork of the Salmon River in the Frank Church River of No Return Wilderness. I personally guide on all of our river trips, so you are listening not only to a businessman but a person who is directly in the field every river trip day.

Mostly we have a good working relationship with the Forest Service. At other times they seem to ignore our input, as the following examples will illustrate. Outfitters met regularly with the Forest Service for several years leading up to the release of the draft environmental impact statement for the Frank Church River of No Return Wilderness in 1998. We were regularly assured that the resource was in better shape than when the Wilderness was designated in 1980. With minor tweaking in management, the Middle Fork could be expected to remain in great shape for the foreseeable future. We should expect only minor changes in management through the DEIS.

In January 1998 the DEIS hit the streets and what a bombshell. The preferred alternative called for a 50-percent cut in river use, guided and nonguided. The preferred alternative recommended that a large portion of summer use be shifted to winter use, telling us that the Forest Service personnel obviously had no understanding of our business operations, let alone Idaho's weather. As you can see by the chart, they wanted to shift the peak use in the summer to the shoulder seasons, which in the Frank Church, the river is froze over and under several feet of snow.

[The graph follows:]



Senator ENZI. Figures.

Mr. BUKOWSKY. Private and commercial users in the Frank screamed loudly. The Forest Service backed down, acknowledging publicly that they had spent \$1 million on a DEIS that was seriously flawed. Forest Service staffers with a purist bent toward wilderness river use had misinterpreted their own sociological data in writing the DEIS. Outfitters had no alternative but to raise over \$50,000 and spend countless hours of our time and many sleepless nights in order to deal with the inaccuracies in this dishonest document.

To their credit, the Forest supervisors, especially George Matejko and Dave Alexander, became actively involved and worked closely with all users in a supplemental EIS process. The record of decision will be out sometime next year. Only then will we know if the Forest Service has really been up front and honest in their dealings with us.

Outfitters on the Middle Fork tend to pinpoint the last decade as a turning point when the long history of good relations with the Forest Service began to disintegrate into a rockier road. For example, on April 9, 1997, we had an emergency meeting with the Middle Fork river managers. They told us that sensitive Native American sites along the Middle Fork were showing signs of abuse and would be closed to camping if our care for these sites did not improve in the coming season.

These are prime camping sites for us, clustered closely together along a specific stretch of the Middle Fork. Closure would mean long days on the river without hope of a campsite for our guests, which naturally could lead to a serious safety issue.

On June 12, 1997, barely 2 months later, outfitters showed up on the Middle Fork to launch their first trips of the float season. They were met at the launch site with paperwork from the same district ranger who had been at the April meeting, ordering that all 10 of the campsites were now closed to camping, as you can see by the letter signed by the district ranger.

Outfitters immediately insisted upon a joint field trip. After much work and public involvement during the height of our operating season, the Forest Service finally agreed to a mitigation plan and reopened most of these campsites.

The kicker in this story is that the campsite closure order given outfitters as they launched their first trips in June had been signed by the district ranger on April 1, 1997, 8 days before our emergency meeting with the outfitters he called together on April 9. What possible motive could the agency have had in hiding a decision already made 2 months earlier? Why in the meantime were we led through the charade of thinking outfitters and other boaters would be part of the decisionmaking process?

[Form R4-2300-4 follows:]

(R6-2300-6)

DETERMINATION OF SIGNIFICANCE AND EFFECT
USDA Forest Service Intermountain Region

Salmon & Challis National Forests

Middle Fork Salmon River Cultural Resource Mgmt.PY-96-1162

Project Title

Report Number

A cultural resource investigation has been conducted for this project and cultural values have been identified. Based on the attached report, the Forest Service has made the following determinations.

CULTURAL SIGNIFICANCE:

CLASS	No. of Sites	USFS Site Numbers
I - Eligible	10	CH-513 (10LN-28), CH-225 (10CR-875), CH-228 (10CR-876), CH-330 (10CR-929), CH-580 (10CR-1318), BS-480 (10VY-11), BS-487 (10VY-19), BS-373 (10VY-80), BS-380 (10VY-82-83-84), and BS-260 (10VY-124).
II - Potential		
III - Not Eligible		

EFFECT:

NO - There are ongoing Adverse Effects.
 (X) There will be no effect to the following Class I & Class II sites because:

Rationale**Sites**

They are outside the project area....[]
 They are outside impact zones.....[]
 Final project plans will avoid them....[]
 RA character will not be changed.....[]
 Other (explain).....[X] Same as above.

[] Sites will be affected, as indicated below or in the attached explanation.

COMMENTS AND COORDINATING REQUIREMENTS - The following actions are proposed to ensure the protection of known or suspected sites. [] None

The Forest will remove the following sites from those listed as being available for overnight camping by river boaters as recommended in the attached report: Cow Creek (10LN-28), Lower Jackass (10CR-875), White Creek (10CR-876), Fungo (10VY-80), Rock Island (10VY-82-83-84) and Pebble Beach (10VY-124). Occasional use by backpackers, picnickers and hunters may still occur at these sites, however primitive toilets at these sites will be removed to discourage camping, and all use will be monitored during regularly scheduled river patrols. Cameron Creek (10VY-11) and Hospital Bar (10VY-19) will also be added to the above list of those sites to be monitored. Site testing of 10VY-19, 10CR-929 and 10CR-1318 will be accomplished as funding or other programs becomes available.

NOTE: According to the Challis National Forest records, the Smithsonian site number for Lower Jackass was changed from 10CR-575 to 10CR-875, and for White Creek from 10CR-576 to 10CR-876.

FOREST SERVICE CERTIFICATION

[Signature] 4/1/97 *[Signature]* 4/1/97
 Professional CMR Specialist Date Line Officer Approval Date
 ("Required when significant sites may be affected and/or non-routine action is recommended.")

Mr. BUKOWSKY. There are also examples, however, of success in turning things around, in this instance in the Sawtooth National Recreation Area in central Idaho. Just 3 years ago the Upper Main Salmon River resource managers and outfitters were on extremely divergent roads relative to common sense management of that section of the river. To protect spawning Chinook salmon, the river was abruptly closed to float boaters each August, often with less than 12 hours notice. Lawsuits were filed. Communications between the outfitters and the Forest Service became nonexistent. Thanks to the constructive attitudes of two new rangers on the SNRA staff, outfitters and the Forest Service are once again working hand in hand. Communication and understanding there could not be better.

Communication and collaboration is the key. Unfortunately, abrupt management style has become typical behavior for many within the agency. Because the special use permit conveys a privilege, not a right to operate, outfitters have little or no defense against sudden changes in the rules. A permit is not a contract and the sudden loss of privileges previously agreed upon between the agency and an outfitter is not compensable nor necessarily negotiable.

Senator Craig recently reported legislation from the Senate Committee on Energy and Natural Resources that goes a long way toward providing a stable regulatory climate for the outfitting industry. S. 1969 seeks to create a statute from existing Forest Service outfitter and guide regulations that have worked well until recently. This legislation would put a stop to the agency's manipulation of outfitter rules into a moving target.

Overall, the Forest Service is desperate for money and staff and the new cost recovery program for commercial outfitters is one of several new sources of agency revenue that threatens outfitters. Cost recovery, as proposed earlier this year, promises additional financial burdens that may break the back of outfitters and other small business operations on forest lands.

In Idaho, cost recovery has already been proposed on the Upper Main Salmon River where outfitters and private boaters need a new take-out site in the effort to protect summer Chinook on their traditional spawning grounds. The Forest Service told us that all costs for NEPA analysis related to this new take-out would be charged exclusively to the four small float businesses that operate the Upper Salmon, despite the fact that many nonguided floaters enjoy the same stretch of river and would share the facility. Total cost for this NEPA work is estimated at \$132,000, a \$33,000 hit on each of these four outfitters and no hit on private boaters, which perfectly illustrates outfitter concerns about implementation of national cost recovery rules proposed earlier this year.

The real kicker in the national cost recovery rule is the requirement that all fees be paid up front even prior to the resolution of a dispute or the permit will not be processed and you are out of business.

In conclusion, I would like to emphasize to the Committee that outfitters fear they are seeing encouragement within the Forest Service of prejudice against commercial operations on forest land. Over 32 percent of the land in this country is owned by the Government. In recognition of this, agencies like the Forest Service must

adhere to policies that sustain private sector businesses offering quality services to forest visitors, taxpaying businesses that are critical to the economies of local and regional communities.

When Congress returns home at the end of this session, I hope that your Committee Members will repeat the theme of today's hearings in a series of town meetings throughout the State this winter. I know you will have participation from various outfitters and guide organizations. It was not so long ago that outfitters and guides were proud of their partnership with the Forest Service. We continue to be proud of the job we do together to protect the land and serve the public. Locally, it depends upon open communication and mutual respect.

Mr. Chairman, it is my hope that your hearing today will be an important step toward putting the outfitters and other user groups, the Forest Service and the communities they serve back on this positive collaborative path. Thank you.

[The prepared statement of Mr. Bukowsky follows:]

165

Testimony

of

**Al Bukowsky
Solitude River Trips
Post Office Box 702
Salmon, Idaho 83467
800-396-1776
208/756-8068 Fax 208/756-6078
email: solitude@rivertrips.com**

on

The U.S. Forest Service: Taking A Chain Saw To Small Business

before the

**Committee on Small Business
United States Senate**

October 4, 2000 - Washington, DC

Mr. Chairman, I appreciate this opportunity to testify before the committee. The management of federal forest lands and forest uses is undoubtedly the single most significant factor in the economies of the rural communities in which my family and our employees live, and so we are particularly grateful congressional attention is being focused on our relationship with the Forest Service.

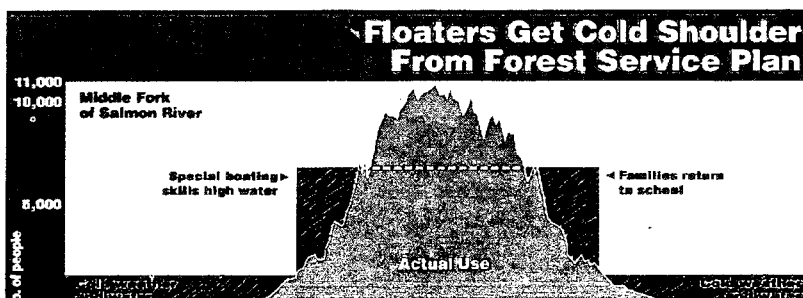
My name is Al Bukowsky, and along with my wife Jeana, I own and operate Solitude River Trips, a small outfitting and guiding business that operates under a Forest Service special use permit in Idaho's Frank Church River of No Return Wilderness on the Middle Fork of the Salmon River. We live six months of the year in Salmon, Idaho, and six months in Grants Pass, Oregon, chasing steelhead. I have been operating since the mid-1970's on the Middle Fork. I personally guide on all of our river trips, so you are listening not only to a businessman, but a person who is directly in the field every river trip day.

Most of the time we have a good working relationship with the Forest Service. At other times they seem to ignore our input, and as the following instances will illustrate, they have not exactly been honest in their dealings with commercial users.

In 1993, the Forest Service hosted a symposium in Boise, Idaho, regarding the future management of the Frank Church River of No Return Wilderness. Later, the Forest Service convened a citizens' task force using a Limits of Acceptable Change planning process, but disbanded the task force after a year or so, citing concern about the Federal Advisory Committee Act. Then the agency moved directly into a NEPA process, eventually producing a Draft Environmental Impact Statement.

In the several years leading up to the release of the Frank Church River of No Return Wilderness DEIS in January 1998, outfitters individually and collectively provided input and had regular meetings with resource managers. They continually stated that the resource was in better shape than when the Wilderness was designated in 1980. With some minor tweaking in management, the Middle Fork could be expected to remain in great shape for the foreseeable future. In fact, we were told at an early January 1998 Idaho Outfitters and Guides Association annual meeting by the then-District Ranger that we could expect only minor changes in management through the DEIS.

Their DEIS hit the streets in late January. What a bombshell!! The preferred alternative was a 50% cut in all river use, guided and non-guided! The preferred alternative recommended that high use in July and August be shifted to the March-to-May period and to October/November. No one could imagine families and seniors vacationing in Central Idaho in winter-like conditions!



This chart will help the committee understand. In the time frame that the Forest Service shows in their graph people would have to float the river when it's frozen and under several feet of snow. As the bell curve illustrates the peak season begins in late June, peaking in July, dropping off in August, and then the number of guests tapers off dramatically. This clearly illustrates that the Forest Service personnel that wrote the DEIS had no understanding whatsoever of not only how our businesses operate, but also of Idaho's weather.

All users of the Frank screamed loudly. The Forest Service backed down and stated publicly that they had spent a million dollars on a DEIS that was seriously flawed. Forest Service staffers with a purist bent toward wilderness river use had misinterpreted their own sociological data in writing the DEIS. Outfitters had no alternative but to raise over \$50,000—and spend countless hours of our time and many sleepless nights—in order to deal with the inaccuracies in this dishonest document.

To their credit, the Forest Supervisors, especially George Matejko and Dave Alexander, became actively involved and have worked closely with all users through the Supplemental EIS process to assure that the next document is not another disaster. That process is ongoing. The record of decision will be out sometime next year. Only then will we know if they have really been up front and honest in their dealings with us.

Users of the Middle Fork tend to pinpoint the early 1990s as a turning point when the long history of good relations with the Forest Service began to disintegrate into a rockier road.

For example, on April 9, 1997, we had an emergency meeting with the Middle Fork Ranger and his assistant. They told us that there were some sensitive Native American sites along the Middle Fork of the Salmon River that were showing signs of abuse. Working together, they told outfitters, we should be able to devise and implement mitigation short of closing camps. These sites are prime camping sites, crucial to our businesses, and have been used by European Americans throughout the 20th Century. We were told that if we, along with all users, made an effort that coming season to keep these sites in better shape, they would remain accessible. If, however, these sites continued to deteriorate, the Forest Service would have no choice but to close them in the future. The District Ranger was present at this meeting and suggested a few different ways to alleviate the deterioration of the sites.

On June 12, 1997—barely two months later—outfitters showed up on the Salmon to start their float season. They were provided a document called “Determination of Significance and Effect” signed by the District Ranger, saying that all ten of the sensitive sites were closed to camping. It happens that these 10 campsites are bunched up, so that outfitters were suddenly looking at an impossibly long float day through that section of the river, with no hope of locating a suitable campsite before the onset of nightfall. Outfitters suggested a field trip in the immediate future for interested parties and agency river managers, all of whom needed to be involved in identifying alternatives for the sake of safety on the river. After much work and bringing together of people during the height of our season, the Forest Service decided to reopen most of the sites.

However, the kicker in this story is that the campsite closure order given outfitters as they launched their first trips in June was signed by the District Ranger on April 1st—eight days before the initial emergency meeting the Forest Service called on April 9. What possible motive could the agency have had in “hiding” a decision already made two months earlier? In the meantime we

were led through the charade of thinking outfitters and other boaters would be part of the decision-making process.

Problems like these are so frustrating, and so common, that some outfitters believe the goal of the Forest Service is to drive them out of business. But sometimes problems get so bad that outfitters and the Forest Service managers are finally forced to learn how to work together again.

A successful example of how a bad situation can be turned around exists in the Sawtooth National Recreation Area in central Idaho. Just three years ago, resource managers and outfitters on the Upper Main Salmon River were on extremely divergent roads relative to common sense management of that section of the river. Lawsuits were brought. The river was closed. Communication between the outfitters and the Forest Service was non-existent.

The potential for conflict on the Upper Salmon began in 1992 when Forest Service managers and outfitters began the struggle to develop a policy for protecting endangered salmon, yet allowing floatboating to continue on the Upper Main Salmon. Over the first five years of that effort outfitters were excluded more and more from the decision making process. The worst moment came in 1997 when the Area Ranger closed the river with less than 12 hours notice, without consulting outfitters, and in violation of Forest Service regulations. After one outfitter did a protest float trip and felony criminal charges were filed, public demonstrations erupted against the Forest Service on a wide range of other issues that had been simmering for years in the local community.

Just when things appeared hopeless, the situation started getting better. The Area Ranger decided to change jobs. The new Area Ranger made it clear that it was time for a fresh start. She and her staff began involving members of the community as much as possible in the decision-making process. Today, outfitters and Forest Service managers in the SNRA are working together with greater respect and effectiveness.

Examples like this encourage the hope that the problems we are discussing here today can be transformed into better relationships with the Forest Service tomorrow. But this hope will only be realized if the Forest Service managers understand that the key to solving problems is to involve ALL stakeholders in the decision making process.

Similarly, our horse packers in Idaho, Montana, and other public lands states are being told to eliminate use of non-system trails, even though these trails have been approved annually for use in their Operating Plans for many years, if not decades. Land managers have reason to be concerned that the quality of the outdoor experience is degraded when trails become too crowded, yet here they are in that same context, eliminating non-system trails that have traditionally been established and maintained by outfitters and guides as a means of not intruding upon the non-outfitted public on popular public riding or hiking trails.

These same kinds of snap decisions are being made every day with respect to party size for commercial group trips. "Small is better" is the trend within the agency in determining biological and social carrying capacity, though one could logically argue that the consequence is the same number of people fanning out in all directions across the landscape. I can predict that a greater and greater number of visitors are now unsupervised in these activities, since downsizing is making outfitted trips more expensive.

The trend toward smaller and smaller party sizes illustrates how poorly the Forest Service understands the recreation market. Families are the market these days. Without reasonable party

sizes that allow charging a price that families can afford, many outfitters will simply be forced out of business or forced to turn to a different upscale, adult market. Many families will be denied access and an affordable opportunity to see the last wild places under the supervision of professional guides, who keep these greenhorns safe while interpreting unique landscapes.

An example of this can be found on the Wild and Scenic Chattooga River that runs along the border between South Carolina and Georgia. Here, outfitters are limited to one small trip a day on weekends. The business economics of river running with these kinds of restrictions are not pro-consumer. Why would a family pay \$100 per day per person to run the Chattooga, when this family (and 200,000 other folks) can experience the same thrills on the nearby Ocoee River in Tennessee for \$30? The decision to downsize recreational opportunities is hurting families, and it is dislocating direct economic benefits to local communities.

Economies of scale related to the outfitting business are, at best, situational and confusing. There is no set size that makes an operation viable. Economies of scale are generally better, the larger the party size. But the frequency of trips (more launches, more hunting days) can offset lower party sizes somewhat. The number of outfitters in the area (not just locally) can also determine what an outfitter can charge. Hunting trips have a different economy of scale than river running because the hunting market can, and expects to, pay more. The bottom line: if you want viable operations that are accessible to families, party sizes have to be sufficiently large and capacity has to be ample. And ultimately, the Forest Service must relearn the fundamental American principle that profit is not evil.

Unfortunately, the Forest Service is allowed to downsize our trips in a decision-making process that doesn't require input from outfitters, or from visitors who need or desire outfitter services. Determining carrying capacity can be, and often is, a back-of-the-envelope exercise in which a field manager simply decides, based on his or her personal values, whether four or six or eight or 10 people "feels right" on the landscape. The results of this decision-making process might then be folded into any public process required by the National Environmental Policy Act, but public participants have no means of knowing whether good science, bad science, or voodoo science provided a foundation for determining carrying capacity. Or, what is more common, is that the outfitter is simply told the outcome of the Forest Service's carrying capacity decision, and told to reduce party sizes to comply, but given no additional launches or hunting days to make up the difference.

I don't think I need to belabor members of this committee with the financial bottom line. Outfitting businesses are seasonal. The typical whitewater outfitter on the Salmon River earns enough money to pay his bills, fees, and taxes by roughly mid-August and then begins to turn a profit on the year's work. That profit is needed to feed my family through the winter, and to jump start the coming season with new brochures, advertising, and equipment replacement. Every guest I lose because of reductions in party size represents at least another day of operation toward the end of the season before my winter nest egg begins to kick in, and this is true for virtually every outfitter in the business, whether their operations are land-based or water-based.

This abrupt management style has become typical behavior for many within the agency. Because the special use permit conveys a privilege, not a right to operate, outfitters have little or no defense against sudden changes in the rules. A permit is not a contract, and the sudden loss of privileges previously agreed upon between the agency and an outfitter is not compensable, nor necessarily negotiable.

Senator Craig, along with cosponsors Senator Crapo of Idaho, and Senator Thomas of Wyoming, recently marked up legislation in the Senate Committee on Energy and Natural Resources that will go a long way toward providing a stable regulatory climate for the outfitting industry. S. 1969 draws upon the existing Forest Service and Bureau of Land Management outfitter and guide policies, which have worked reasonably well over the last 20 years, to create actual law to guide permit administrators in their decision-making. S. 1969 would prevent the rules from being manipulated into a moving target.

This target began moving in the early 1980s when the agency began a formal rulemaking process in consultation with outfitters and other interested parties, including a large number of congressional offices. It took over a decade before we saw a Final Outfitter and Guide Policy published in the *Federal Register*. The agency, however, decided in 1997 to translate its own published policy into an "Outfitter-Guide Administration Guidebook" for use in the field, and not surprisingly I guess, many key management provisions in that Guidebook differ from the Policy. These differences create perpetual confusion and mistrust in permit administration. Often, field staff say to outfitters that their operations are now "decentralized," and they needn't be guided by either the Policy or the Guidebook. Four years later, promises to fix the differences between the policy and the desk guide are unfulfilled.

With or without enactment of S. 1969, we're told that the Forest Service now intends to rewrite its Outfitter and Guide Policy again next year. It's uncertain, because of the Federal Advisory Committee Act, what role outfitters will play in the earlier stages of writing new rules. Outfitters are therefore especially grateful that the congressional process gave us, the outfitted public, and other user groups a voice in the development of the language of S. 1969, and we hope that S. 1969 will guide the work undertaken by the Forest Service next year.

Nationally, the number of forest-related issues we've faced in recent years is staggering.

Uppermost in our minds at the moment is recovery from the catastrophic wildfires experienced this summer. A river runner like myself is likely to return to a somewhat scarred river corridor, but at least we have the expectation of returning to work next summer. Many land-based outfitters face an entirely different and dismal prospect, having seen their areas of operation totally devastated by fire. In several cases, they lost the physical structure of their ranches or resorts as well.

During the height of the summer fires of 2000, nearly 150 small Idaho businesses were unable to provide services to nearly 2,150 guided vacationers between August 14 and September 6 because of closures of public lands and waters, particularly in central Idaho. Loss of business for these 150 businesses is estimated at \$2,500,000. Subsequently, two land-based outfitters on the Middle Fork Salmon cancelled their entire fall hunting season and returned a combined \$200,000 in deposits because the firestorms of August 18th and August 26th devastated many structures on private inholdings. These fires also severely burned surrounding public watersheds and trail systems.

The Forest Service must once again look at how fires will be addressed in the wilderness. A specific line item for firefighting funds should be established that would allow for sufficient initial attack crews to extinguish fire starts in wilderness areas before they erupt into fires that consume hundreds of thousands of acres, as was the case this summer in the Frank Church River of No Return Wilderness. Yes, fire is a part of the wilderness ecosystem, but not to the extent that it occurred this year. And remember that the Frank was designated in 1980, well into the 75-year history of the Smokey the Bear regime. This wilderness ecosystem is not natural. Resources must

be available, not only to save lives and structures outside of wilderness, but also to lessen the impact to wilderness areas in extraordinarily dry years like this one. It is conceivable that the Forest Service would not have had to close wilderness lands and the two rivers in the Frank, had sufficient resources been available for initial attack.

Agency funding is an issue that seeps into the cracks and corners of every aspect of our relationship with the Forest Service. Because funding and staffing are insufficient, district rangers are seldom in the field to actively participate or observe resource conditions and visitor activities. Decisions on applications, amendments to permits, and performance evaluations are woefully behind schedule, or neglected altogether.

The Forest Service is relying upon two new programs for funding relief. One is the Recreation Fee Demonstration Program, which has been implemented with a combination of enthusiasm and loathing in the field. Where user groups have been brought into the process in setting fees and picking projects to fund, the results are generally good. The Forest Service has otherwise taken some hard knocks in its efforts to act like entrepreneurs, and the public backlash has been severe. We've learned in the process that it's fairly easy to collect fees from all users in river settings, but much more difficult to accomplish for dispersed land-based activities. Fee collection is absolutely foolproof when the outfitters are responsible for collecting such from their guests, and so it's probably fair to say that outfitters and their guests—who are already paying fees—are the most consistent source of new revenue from Fee Demo.

Implementation of Fee Demo also put a spotlight on the federal funding relationship with county and local governments. Oddly, revenue to the agency from outfitter and guide fees is not counted toward federal obligations to the counties under the Payment In Lieu of Taxes program. Even so, the Forest Service often elects to pay 25% of outfitter fees and some other recreation fees to adjacent counties, but is not obligated to do so. Year-to-year authorizations for the Fee Demo program specifically prohibit payment of any of this new agency revenue to local governments, even though many counties throughout the West face an uncertain future in which recreation is their only remaining economic alternative. We know that Senators Craig and Wyden are working to bring PILT back into line with the expectations of community leaders in the public lands states. Any future formula that divides federal revenue with the counties based upon severance or services must take into account the importance of recreation revenue.

The Forest Service's new cost recovery program for commercial operators is the other new source of agency revenue that promises to put additional financial burdens on outfitter and guide operations.

In Idaho, cost recovery has been proposed for the Upper Main Salmon River. Outfitters proposed an alternate take-out site for floatboating trips because the float season is now shortened every year in August or early September due to the return of endangered summer chinook to their traditional spawning ground. The Forest Service said the costs for preparing a NEPA document related to the alternate takeout site would be borne entirely by the four small commercial float businesses that operate there, even though many non-guided floaters enjoy the same stretch of river. The total cost is estimated at \$132,000 ... a \$33,000 hit on each of these four outfitters.

As jointly proposed recently by the Forest Service and the Bureau of Land Management, national cost recovery efforts could easily break the financial back of small businesses operating in National Forests and on public lands. The application fee (\$75 for a permit renewal or transfer) is reasonable and affordable. For a new business opportunity, or when expansion of an existing business is contemplated, the agency expects to also recover its full costs for environmental

analysis. To some degree, this is reasonable when the business owner is the sole beneficiary. It remains to be seen, however, whether NEPA costs for small businesses are also affordable when the agency has exclusive control over establishing the requirements and performing much, or all, of the work.

Separately, the agency also proposes to charge its costs for monitoring the outfitter's compliance with the permit in the first year of the term of the permit. This is a redundant agency activity in the context of the Outfitter and Guide Policy, which requires a separate annual evaluation of each outfitter's performance.

What have friendly Forest Service field staff told outfitters about application fees and cost recovery?

"Katie, bar the door" ... or words to that effect. The Proposed Rule, to be made final late this year, was vague in describing the scope of agency work subject to cost recovery. We're told by friendly field staff that outfitters operating in an unfriendly, under-funded ranger district might expect to be tagged in a single year for upwards of \$75,000 in application or monitoring fees. This windfall of untapped financing could allow ranger districts to monitor current or prospective outfitter impact on other user groups (any yet-to-be-funded carrying capacity study on a ranger's "to do" list), impact on endangered species habitat, impact on campsites, launch facilities, trails, etc.

The real kicker in the Proposed Cost Recovery Rule is the requirement that all fees be paid up front, even prior to the resolution of a dispute, or the permit will not be processed, and you're out of business.

An important point of law related to cost recovery has already been well established in the courts. Outfitters, as represented by our national trade association, America Outdoors, have asked Congress to reaffirm this important legal principle as the Forest Service moves forward to implement its cost recovery program. The law, and related court rulings, provides that the costs of agency services and activities that benefit broadly the general public should not be the basis of fees levied on specific private entities. [31 U.S.C. § 9701, *Public Service Co. of Colorado v. Andrus*, 433 F. Supp. 144 (D.C. Colo. 1977) and *Seafarers International Union of North America v. Coast Guard*, 81 F. 3d, 179 (D.C. Cir. 1996)] Outfitters are small businesses, and the effort to impose public costs on these private entities is being done contrary to the Small Business Regulatory Enforcement Act (5 U.S.C. § 804) and the Regulatory Flexibility Act (5 U.S.C. § 601 *et seq.*). Imposition of these costs will greatly increase prices to consumers and have a devastating effect on many of the over 6000 outfitters and guides operating on public lands.

A very fundamental problem in the outfitting industry today is this fee-upon-fee phenomena. Because outfitters, and other commercial recreation service providers, operate under permits "They know where you are!" as the saying goes, and this warning against federal regulators is applied with a vengeance by the new "entrepreneurial" Forest Service. Beginning in the 1970's (or earlier) outfitters paid a concession fee, currently 3% of gross revenue and soon to be increased, we're told. Packers also pay a grazing fee. In the 1990's, the Forest Service began referring to the concession fee as "the outfitter's fee" and wants to charge an additional per-head, per-day fee for each guest, now partially implemented through the Fee Demo program. Ever unnovative, Fee Demo has also piled on launch fees, parking fees, trailhead fees, and other assorted fees. Add to this, beginning next year, application fees and monitoring fees under cost recovery. In the meantime, staff in the Alaska Regional Office of the Forest Service has been asked to determine whether current outfitter fees are recovering fair market value, which the

General Accounting Office insists such fees are not. Lurking as background music to the Forest Service's appetite for new and higher fees are the ordinary outfitter obligations to pay city, county, and federal income tax, as well as an array of state and local hospitality taxes, fishing and hunting permit fees, gas tax, etc.

Indeed, a bunch of tax agents and fee collectors know where we are, as the saying goes, and I trust that members of this committee are eager to see rational fee policies that assure we'll continue to be there. The only fair answer is a single consolidated fee for outfitters—a cost factor in annual operations over the term of the permit, so that we (like other small businesses) can measure past economic performance and plan for the future. Our employees and our communities depend upon a bottom line for rural small businesses that is expressed in black ink.

This issue of "where we are" became very evident in a different context in debates with the Forest Service about the existing forest road system and this Administration's new roadless policy. Our guests are largely looking for a "roadless" experience, but most outfitters are entirely dependent upon forest roads to haul guests and gear to a launch site or trail head providing access to this experience. Navigating funky roads in all sorts of weather is an outfitter specialty, and for decades we have grumbled and groused about every mile without any thought of gratitude for the Forest Service timber program that caused most of these roads to be built. In fact, as we grumbled about road conditions, outfitters also tended to grouse about the visual impacts of logging.

Reality is often a humbling experience, but outfitters have come to realize in the last decade that we share a cultural and economic heritage with many other diverse forest uses. Love them or hate them as fellow user groups (or some sentiment in between), we now share with all other forest-related communities the consequences of agency leadership in the Forest Service that appears to be unsure of its role in sustaining local economies. Where land trust organizations like The Nature Conservancy made great strides in connecting sound conservation practices to people's vision of their "home place," the Forest Service appears to be positioning itself to fall flat on its face.

Nonetheless, outfitters are likely to depart radically from a number of other fellow user groups in the future management of roadless areas. Roadless areas are our particular style of Main Street storefronts, so to speak. Roadless backcountry and wilderness are what the outfitted public is eager to experience. Whether guided or self-skilled, visitors to roadless areas aren't looking for the scrubbed, risk-free thrills and environment of a theme park. They want miles upon miles of natural settings, untouched native beauty, and an honest chance to prove their mettle against the real risks of weather, critters, and terrain.

And so why did outfitters flinch when this Administration proposed to protect roadless areas from roads? Reading between the lines, the policy and its less-discreet advocates appeared to be preaching: "No shirt, no shoes, no roads, no people, no permits, no outfitters."

In conclusion, I want to emphasize to the committee that outfitters fear they are seeing steady expansion within the Forest Service of prejudice against commercial operations on forest land. Worse, the agency's culture has changed so radically over the past decade that it's now considered OK to express this prejudice in both words and action. No responsible outfitter would disagree that a bad operator should be eliminated, nor disagree that an activity damaging to resources needs to be modified or eliminated. The Forest Service must not, however, strive to exclude businesses to the extent that the agency loses track of its critical role in rural communities and regional economies. Over 32 percent of the land in this country is owned by the government,

and in recognition of this, agencies like the Forest Service must adhere to policies that sustain private sector, taxpaying businesses on the land and resources they manage.

In two weeks or so, members of this committee will be returning to their home states until a new Congress assembles in January. It is my heartfelt belief that the issues raised in this hearing today represent the economic backbone for any town, any county, any state in which the National Forests are located. I hope that our Idaho congressional delegation will repeat today's hearing in a series of town meetings throughout the State this winter. I also know that our state outfitter and guide associations would welcome similar meetings in Montana, Wyoming, and elsewhere in the public lands states.

It wasn't so long ago that outfitters and guides were proud of their partnership with the Forest Service. Locally, where relations have remained respectful and positive, we continue to be proud of the job we do together to protect the land and serve the public. At the heart of the matter, when the Forest Service is up front and honest in their dealings with the public—even when the news is not what user groups and the public want to hear—the partnership survives the rocks in the road. Unfortunately, this kind of open and honest communication is not happening the way it used to occur.

Mr. Chairman, it is my hope that your hearing today will be an important step toward putting the outfitters, other user groups, the public, and the Forest Service back on that positive, collaborative path.

Senator ENZI. Thank you. This testimony has been outstanding and very helpful.

Senator Burns has some appropriations meetings, which is a key thing. We are in the process of spending \$1.8 trillion and he needs to go do some specific work on that, so we will defer to him for questions first.

Senator BURNS. Thank you, Mr. Chairman. I will be very, very short. I want to ask a couple of questions.

By the way, I want Mr. Bousman to know that during the fires in western Montana I was down in the Big Hole, and you are familiar with Wisdom and through that country, and I was talking to the ranchers down there. We had a visit from the Rainbow family on the Forest Service land out there this year and there are about 20,000 of them, they figure, but they just flock everywhere.

We got to go up and look at a couple of pastures, a couple of meadows that they just trashed. These people, 20,000 of them, had no permit to be there, none. They just flock in there and they destroy. You ought to see these meadows. I mean they are terrible. And when you compare them to a year ago, pictures taken, it was something.

I asked the forest supervisor about that and why we have to jump through all the hoops for permits and then these people can come in and trash an area, leaving big rocks in the road so that you cannot get in and out, and they said they cannot get those people off of there. So there is a double standard here and we want to do away with that double standard if we possibly can.

Mr. Hurst, we know that the Forest Service also has to adhere to some laws of the land—clean water, clear air, NEPA—all of these laws that have been passed by this Congress. If there was one—if you could put your finger on one thing that would facilitate and bring some collaboration and communication between the Forest Service and your company and the management of those resources, what would it be? What would you advise us to change now that would facilitate both protecting the forest and making sure that we have a forest there for our children and our grandchildren?

Mr. HURST. It would probably be the Endangered Species Act. And I realize that is probably too much to bite off but what we need is more local control, more input and some trust in the folks at the local level that are making the decisions.

Now we have purchased fire killed timber 500 miles north in the province of Alberta. I think it is the first time that government wood was ever exported to the United States from Alberta. The reason we did that is because we could not wood our mill from U.S. Forest Service timber because of the decline in timber sales from that agency.

What I found is that the people in Alberta are closer to that resource. In other words, the province has control of the timber. As a result, they have a healthy economy. They harvest the timber, in this case burnt timber, in a timely fashion so that they can take the revenue from that harvested timber and reinvest it back into the ground in the form of reseeded or restoration.

In the United States we do not do that. We do everything we can to keep resource workers unemployed, it appears, and we are not

making the local decisions that we should, and that is why I talked about trust. And people, as you all know, out West we are not going to trash our own backyards, especially the folks that live there and have lived there. That is ridiculous.

So I would guess something has to be done with the Endangered Species Act. We have got to speed up this appeals process and we have to have more trust in locals. That is not one thing; it's three things; I realize that. But if we can get more control back to the local land managers to make the decisions, that would greatly help our industry and our communities.

Senator BURNS. I want to ask the grazers, also. Mr. Bousman, what would you ask us to change to facilitate maybe cooperation between the agency and the grazers and to make sure that we can manage that resource?

Mr. BOUSMAN. Well, Senator, I think one of the concerns that has the most impact on our type of operation is the fact that too often decisions are made that do not have the scientific justification to make them. In that kind of a case I think if there was one thing that this Congress could do that would help the people on the land more than anything else, it would be to put the burden of proof on the Government. Before they could make a decision they should know that that decision is in the best interest of the resource and the best interest of the environment. Instead of doing that, they are making these decisions based on what is politically correct, not what is best for the land.

Senator BURNS. Anyone else want to comment on that question?

Mr. TINSLEY. Yes, I would, Senator Burns. If you talk to a lot of these retired forest people that are on the ground in Wyoming, they say the best years of the National Forests in this country were when it was managed from the bottom up rather than from the top down. That was when we had the best use and the healthiest forest.

Senator BURNS. If we expanded the SBREFA to include the Forest Service, would that help? That is the accountability, you know. It makes them accountable on all the decisions they make.

Mr. HURST. I think they should be. I mean they are directly affecting the lives of a broad spectrum of Westerners. They should be held accountable.

Senator BURNS. Thank you, Mr. Chairman. Thank you for letting me move up in the questioning.

I want to thank our witnesses for coming this morning because they bring a lot of expertise to the table and we need that in this town. I call this town 17-square miles of logic-free environment, so you bring a little common sense here, so your voice may sound a little strange.

Senator ENZI. I again want to thank all of you for——

Senator BURNS. And you can have my log.

Senator ENZI. Thank you. We will need that.

Mr. Tinsley, you mentioned having hearings in our State and we do that through town meetings and all sorts of different ways. What has been so important for your effort today is that you are bringing a local perspective to the national level. When we talk to the folks in Wyoming, they understand the changes that are being made, but the folks back here have a little different atmosphere to

live in. They have already eliminated most of the Federal land that they can wander around on and places that they can get away from the traffic and everything. So we have a lot of trouble educating Easterners on what it is like in the West. Your pictures and your maps and your letters have been extremely helpful today.

Mr. Bukowsky, you are performing part of this tremendous effort because you are taking the people from back here and you are actually letting them see the area that they worked so hard to set aside, to make sure that it would be in a pristine State, and you are as interested in keeping it in that pristine State so we will be interested in coming to see it. It is kind of an oddity that we have the people out here thinking that the people out there would be interested in ruining their jobs.

Mr. Hurst, we have the sawmills in Wyoming that have gone out of business. They are small businesses compared to the national standard, of course. They are very big businesses in the communities they are in and they just literally devastate the community when they go out of business.

We are talking about healthy forests now, and that is an acceptable phrase throughout the United States. Everybody wants healthy forests. When I was with Senator Burns in Montana we did this hearing and one lady stated that she and her husband own a logging company in Montana and she is the accountant and runs the skidder, sometimes the chipper. That is how small business is. You have to do all of the jobs that are there. She is a little upset that they keep talking about in healthy forests having to grub out this underbrush that is not commercially usable and the dead timber that there is in the forests.

So she brought us that little log to show us what some of this undergrowth is, and it is commercially loggable. It would make a lot of boards for a lot of homes. And if you turn it into boards, it preserves the carbon dioxide that it has been capturing for probably 50 years permanently. If it falls over in the woods and disintegrates, that carbon dioxide goes back up in the atmosphere again and that is what we are blaming global warming for. So we understand the plight and appreciate the perspective that you have brought of how devastating that is.

One of the reasons we are kind of hurrying here is that the Minority has objected to holding hearings over 2 hours. It is a constant protest that they have had for the last couple of weeks. So it is going to limit our hearing today. We are going to have to try to shove everything within 2 hours. We will keep the record open for 2 weeks. Other Members of the Committee may send you some additional questions so that we can get your responses in the printed record.

Mr. Tinsley, I have to specifically ask you a question because I know you have a unique perspective on the impact of forest policies because you deal with paper products when you are putting out your newspaper. Can you tell us a little bit about some of the effects of Forest Service policies on paper production?

Mr. TINSLEY. Thank you, Senator. That is a good question and it is a good point that I would like to make.

I think that the newspaper pulp industry in Canada learned a good lesson from OPEC this summer. They shut down the produc-

tion of newsprint for about 3 weeks, shut it not completely down but they slowed it down about 20 percent, raised their prices by 20 percent and found out just how dang much control they have over the newspaper print industry in America. They liked what they saw, just like OPEC liked what they saw when they shut the oil flow down.

Consequently, we had to go out and buy inferior paper from Mexico. I am not saying that to run down Mexico, but it just is not the quality of paper that we can get out of Canada and what is made here in America. It was pretty devastating and it was scary. I mean they could put us out of business in a heartbeat.

Senator ENZI. So if we are not looking at multiple use we could be looking at—if we are happy with our gas prices now, we will really be happy with our newsprint prices, huh?

Mr. TINSLEY. Yes.

Senator ENZI. Thank you.

Mr. Bousman, you mentioned that your son, Cotton, came back to Washington and had the chance to ask the President a question. I am interested in what the response was to that question on grazing fees and also what your son thinks are his possibilities for being able to maintain the way of life, the open space and the future as he has envisioned it.

Mr. BOUSMAN. Senator, as far as the question, my son was fortunate enough to get to ask the President if he understood the interrelationship between the nonfee costs associated with grazing on public lands. The President indicated that he did not understand that. I cannot say as anything has changed except not just within the Forest Service but within all the Federal agencies that people in rural areas in our country have to deal with—the Fish and Wildlife Service regulations, BLM regulations, Forest Service regulations—they have all increased since that time.

I would have to say, in fairness to the President, the grazing fee formula itself is still the same as it was 6 years ago. Other than that, everything has gotten worse.

Not only my son, Cotton, but my other son, I am fortunate that both my boys would love to continue in the ranching business. I do not know how to explain it. It is something they have in their blood. People in our business can understand that. But the sum total of all these regulations—Forest Service is one example and probably the most glaring example but the Department of the Interior regulations, Fish and Wildlife regulations, Endangered Species, the roadless initiative have the impact of severely affecting our ability to continue. And, as I pointed out, the situation we are in, especially in western Wyoming, our options are limited. If I was to guess the way it appears that we are headed in the last years in the regulation from Washington, it is very discouraging, to say the least.

Senator ENZI. Thank you.

One final and what I think will be a quick question. Mr. Hurst, you stated that some day this country will need you but you will not be there. What did you mean by that?

Mr. HURST. Well, let us take the fires, this past summer, for example. Who were the movers and shakers on those fires? The loggers that had the equipment and the know-how to make the fire

lines. That is one way. When we are gone, our loggers go with us. So when it comes to fighting the fires the next time, you know, it is not going to be as easy to put them out, and it was not easy this year at all.

We are a small business and when you take a small business out of a community, for instance ours, who is going to go to that 4H livestock auction? We are having a hell of a poor year financially but we bought five beef and three pigs. Who is going to give the high school scholarships? The Sierra Club? The Wilderness Society? We have not seen one yet.

Those are the kinds of things that will disappear when we do. It should also be noted that we will not turn the switch off because our corporate headquarters are in Stamford, Connecticut, or Seattle, Washington, with no direct contact to the communities. I have to look the people on Main Street in the eye, as these folks do, and we are going to take it that extra step to try to stay in business. That is why I am here. I can guarantee you there are one hell of a lot of things I would rather do than be in Washington, D.C. right now, but I owe it to my community, and I owe it to my employees to be here, so that if I have to turn that key off, I can at least look myself in the mirror and say, "Goddang it, you gave it a try, Jim." Those are the things that you are going to miss.

And I can guarantee you when the Coloradans and the Californians come out to Montana because it is quaint and they kind of like to rub elbows with those ranchers and loggers, all they are going to find is ex-Californians and Coloradans. So big deal.

Senator ENZI. Once again if you like the price of gasoline, you are going to love the price of lumber.

Senator CRAPO.

Senator CRAPO. You might find some Canadian thistle, too.

It is very notable to me that on the panel we have before us we have different industries represented. We have timber, grazing, outfitters and guides, and each industry is telling the same story.

Mr. Hurst, I am not going to ask you a question but I just want to give you a little story of my own about the timber industry. We have a small community in Idaho in Lemhi County called Salmon, Idaho. There are about 10,000 people who live in the entire county and the county is probably the size of one of the northeastern States. About 70, 80, maybe even 90-percent plus of that county is federally- or state-owned.

They had a little timber mill about 6 years ago in this county. I think it employed about 40 people. I went there as a Congressman and toured the mill. They were being threatened with not being able to get timber to cut. I asked them, as I toured the mill, how many board feet of timber they needed to be able to cut in this forest which they live right in the middle of and they gave me a number. I do not remember the number right now but they gave me a number that would keep these 40 people employed.

Then that same day I went to the Forest Service and met with them and they talked to me about the forest management policies and their projections and they told me that in this forest, because of the climate and everything else, it took about 200 years for a tree to mature to where it could be harvested and they wanted to actually go to a 220-year cycle to harvest the trees to have a mar-

gin of error. I thought wow, 220 years, there is probably not much timber that can be harvested out of this forest.

But I asked them. I said, OK, if you accept your approach, how much timber would be able to be harvested in this forest if you kept the forest viable and healthy and only harvested on a 220-year basis? They gave me a number that was 10 times what the little mill in the community needed. That little lumber mill is closed because they could not get enough to keep it open, when even on a very conservative estimate, they could have had 10 times in their local forest what they needed to harvest.

That is the kind of thing I think we are talking about. I want to ask each of you, and I do not know that you all need to answer this question, but I would like to ask if any of you disagree with this statement. I have held a lot of hearings on this type of issue in Idaho in one way or another, whether they be town meetings or hearings or whatever, about the issue of whether we can have a viable, healthy natural resource-based economy and still protect the environment and have a strong, healthy, sustainable environment.

And for people who do not live in these areas, the first question they are often faced with or that those who oppose access to the forests often raise is well, you are going to have to destroy the environment to allow these small businesses to thrive.

Well, the people who live in Idaho want to have our forests be healthy and they want them there for their children and their grandchildren to recreate in and to enjoy for the quality of life and to have an economy, jobs, and the families that depend on those jobs. And I think that is doable.

I would ask if any of you would like to make a quick comment because I have a couple of other questions about whether you think there is an inherent inability to maintain strong, viable forests and still have healthy small businesses in those forests.

Mr. BOUSMAN. Senator CRAPO, I would like to comment along those lines that I do not believe there is any one of us sitting here at this table that do not realize that it is in our own best interest, as natural resource users, to make decisions which are in the long-term best interest of the environment and the natural resource.

If we did not realize that, we would be ultimately putting ourselves out of business.

Senator CRAPO. What would you be doing to your son's future if you destroy the very environment you live in?

Mr. BOUSMAN. That is right. I would be destroying the future of the ability to pass these businesses down to the next generation.

Senator CRAPO. The yellow light just came on so I am going to ask each of the rest of you to just indicate whether you agree with that proposition.

Mr. TINSLEY. Yes.

Mr. BUKOWSKY. Yes.

Mr. HURST. Wholeheartedly.

Senator CRAPO. Let me, in the last minute or so that I have, go to another issue that is very important to me. As we talk about different problems here, it seems to me that NEPA compliance, which you are all very familiar with, I think probably painfully familiar with, needs reform in the Federal system. The reason I say that

is because each of you in one way or another has talked about the need for true collaborative decisionmaking as we approach these policy decisions. Mr. Bukowsky, you had actually mentioned that when it has worked, it has worked pretty well for you in your industry, and when it breaks down is when you really run into these problems.

The question I have is, I think that true collaboration is more than just having an opportunity to comment and then often coming to us and asking to extend the comment period because you do not have time to comment, and more than just the opportunity to go to public hearings. Hearings and opportunities to comment are a form of public participation but to me, it is not collaboration.

I think that we need true collaboration, meaning that the NEPA process should involve the local community, the small businesses in the community, and other interests—the environmental community, those who are concerned about all different aspects of the problem sitting down at a table and working through the best way to find common ground and achieve the multiple objectives that we have for forest management.

Would any of you care to comment on that quickly?

Mr. TINSLEY. Yes, I would, Senator. Talking about the comments, I would like to make a comment about the comments. We do not get any opportunity to comment on how the forest and how the public land is used in eastern America. We would not comment. But the thing that bothers me the most is the fact that a comment coming from Atlanta, Georgia, on how we use our forest in Wyoming has just as much weight placed on it as does a comment coming from Joel Bousman, whose life is going to be ruined by the decision on how to use the forest.

Senator CRAPO. Good point.

Mr. TINSLEY. That really bothers me.

Senator CRAPO. Mr. Bukowsky, did you want to say anything?

Mr. BUKOWSKY. The problem with NEPA is they hold all these town hall meetings and get all your input, and you think it will come out as part of that decision. But there is nothing in NEPA that says that once they have these town hall meetings and they take all this input that they have to use that input. What I have found out lots of times is that you spend years at all these meetings giving them input and then they end up not even using any of it, and the people that are giving the input have far more experience in the field than anyone in the Government.

Senator CRAPO. Thank you. I would love to go on with this with each of you but my time has expired and we are under a deadline here. We need to get the next panel up here so that we do not have to shut down before they have their chance. Thank you very much.

Senator ENZI. I would again reiterate that the record will be open for another 2 weeks, so if you have additional material that you think would be helpful to us, we would appreciate that. And if Members of the Committee have additional questions, they will be sending those.

If our next panel would take their places? We have some expertise now coming from Mr. Larry W. Van Tassell, professor and head, Department of Agricultural Economics and Rural Sociology from the University of Idaho in Moscow, Idaho and we have Wil-

liam McKillop, professor emeritus, the College of Natural Resources from the University of California-Berkeley in Berkeley, California. We appreciate your being here today.

Mr. Van Tassell.

STATEMENT OF LARRY W. VAN TASSELL, PROFESSOR AND HEAD, DEPARTMENT OF AGRICULTURAL ECONOMICS AND RURAL SOCIOLOGY, UNIVERSITY OF IDAHO, MOSCOW, IDAHO

Mr. VAN TASSELL. Thank you, Senator Enzi. I would like to thank you for being able to visit with you today. As has been said, I am a professor and department head at the University of Idaho and only 11 months removed from the University of Wyoming.

My intent today is to discuss with you how decisions made by the Forest Service impact Federal land ranchers. The decisions I will focus on deal with the number of animals that are allowed to graze or the amount of time they are allowed to spend on a Forest Service allotment.

In the 1990s I was part of a study to examine the profitability of a "representative" ranching operation after it adjusted to a reduction in Federal AUMs. An AUM can be thought of as one cow grazing on the forest for 1 month. A mathematical model of a representative 300-cow ranch was developed using input from ranchers who run cattle on the Big Horn National Forest in Wyoming. The model was allowed to adjust cattle numbers and to convert hayland to pasture as Federal AUMs were reduced.

The results of the study are presented in this table. As total Forest Service AUMs were reduced 25, 50 and 100 percent, numbers of cows were reduced from 300 head to 267, 221 and 164, respectively. These reductions translated into a decline in average annual net cash income of over \$11,000, \$15,000 and \$52,000, respectively. The ending ranch equity dropped from the original 88 to 80 percent, 78 percent and 33 percent, respectively, under the 25-, 50- and 100-percent ranch reduction scenarios.

The probability of receiving a negative cash flow increased from 4 percent under the no reduction scenario to 13, 18 and 100 percent as AUMs were progressively reduced. A 36-percent reduction in required labor resulted when all permits were removed.

[The table follows:]

Adjustments to Reductions in U.S. Forest Service Animal Unit Months (AUMs).

Adjustments in:	Percent reduction in USFS AUMs			
	0%	25%	50%	100%
USFS AUMs	942	707	471	0
Number of cows	300	267	221	164
Average annual net cash income (\$)	31,556	20,489	15,893	(20,522)
Probability of negative cash income (%)	4	13	18	100
Ending equity ratio (%)	88	83	78	38

Mr. VAN TASSELL. Not only does a reduction in Forest Service AUMs reduce the income of individual ranchers but the rural communities are also impacted. Dr. Robert Fletcher took the results from our study and examined the impact the reduction in total AUMs of grazing allotted to cattle on the Big Horn National Forest would have on the surrounding four-county area. He found that a 25-percent reduction in grazing would reduce yearly economic activity in the four-county area by \$1.68 million per year, of which \$441,000 would be personal income for local residents. The communities would lose over 31 full-time equivalent jobs.

Similar results have been found by other researchers. For example, Dr. Neil Rimbey found that, in Idaho, the yearly loss in rancher net income from a proposed reduction of 6,000 AUMs on the Sawtooth National Forest was over \$90,000 per year.

Another impact on ranchers from a reduction in Federal grazing is the loss of value in the permit they have purchased. When the U.S. Forest Service permanently cuts grazing rights, ranchers lose the equity they have in those permits. Over the 1985 to 1992 study period, average permit values were generally in the \$40 to \$60 per AUM range for northern States, such as Wyoming and Idaho, where seasonal grazing is common and \$90 or above per AUM for Arizona and New Mexico, where year-long grazing is common.

A rancher that runs 300 head of cows on the Forest Service for 3 months of the year stands to lose approximately \$18,000 in equity if he or she receives a 50-percent reduction in the AUMs they are allowed to graze.

The last thing I would like to mention is the trade-off between wildlife and livestock. I have heard many times that livestock need to be removed from the Forest Service lands to increase wildlife. In most areas, wildlife do not winter on the Forest Service lands but on private lands. When livestock are removed from the Federal lands, every AUM on private land becomes that much more essential to the survival of the ranch.

This additional pressure does not make for a generous landowner when it comes to allowing wildlife to winter on private property. A recent study I did of Wyoming ranchers found that the average operation lost over \$4,000 per year from wildlife depredation. Landowner tolerance, not habitat, is probably the limiting factor that imposes population bounds on big game.

I believe that it is in the best interest of society for the Forest Service and ranching community to work together to keep livestock on public lands. In many areas of the West I feel this is happening. More damage will be done to public lands if ranchers are forced to sell to real estate developers than was ever imaginable with livestock. Thank you.

[The prepared statement of Mr. Van Tassell follows:]

Testimony before the Senate Committee on Small Business

Larry W. Van Tassell
 Professor and Head
 Department of Agricultural Economics and Rural Sociology
 University of Idaho

My intent today is to discuss how decisions made by the U.S. Forest Service (USFS) impact federal land ranchers. The studies I will cite were designed to represent particular areas and the "typical" rancher that is found in these areas.

Forest Service decisions regarding the number of animals that are allowed to graze and/or the amount of time they are allowed to spend on an allotment are the main sources of economic instability for ranchers. This instability results in reduced income and the associated reduction in ranch value, and from the lost value in the federal grazing permit.

Loss in Net Income

In the 1990s I was part of a study to examine the profitability of a "representative" ranching operation after it adjusted to a reduction in federal grazing animal unit months (known as AUMs, or the amount of forage required to feed a mature cow for one month). A mathematical model of a representative 300-cow ranch was developed using input from ranchers who run cattle on the Big Horn National Forest. Through consensus, the rancher panel developed the characteristics, resources, costs, and income structure of the representative federal-land ranching operation. The panel also validated output from the simulated ranch to ensure the information gathered was interpreted correctly. All permittees on the Big Horn National Forest also were surveyed concerning adjustments they would make if USFS grazing permits were reduced by 25, 50, and 100%. The majority of permittees stated they would adjust their resources on their home ranch and keep ranching until they could no longer stay in business; then they would sell out. A few stated they could improve some grazing lands (e.g., spray sagebrush) to increase production, but the majority stated there were not many improvements that could be made.

A model of production alternatives was developed to determine how the ranch could adjust to a reduction in federal AUMs. The model was allowed to adjust cattle numbers and to convert hayland to pasture and to also feed additional hay. The financial consequences of each AUM reduction were examined using a farm simulation model (FLIPSIM) developed at Texas A&M University (see Van Tassell and Richardson for more details on the study).

Results of the study are presented in Table 1. As total USFS AUMs were reduced 25, 50, and 100%, numbers of cows were reduced from 300 head to 267, 221, and 164, respectively. These reductions translated into a decline in average annual net cash income of \$11,067, \$15,663, and \$52,078, respectively. The ending equity ratio dropped from the original 88 to 80, 78, and 33%, respectively, under the 25, 50, and 100% reduction scenarios. The probability of receiving a negative cash flow increased from 4% under the no reduction scenario to 13, 18 and 100% as AUMs were progressively reduced. A 36% reduction in required labor resulted when all permits were removed.

Table 4. Adjustments to reductions in U.S. Forest Service Animal Unit Months (AUMs).

Adjustments in	Percent reduction in USFS AUMs			
	0	25	50	100
USFS AUMs	942	707	471	0
BLM AUMs	1,001	1,001	1,001	1,001
Number of cows	300	267	221	164
Acres hayed	135	117	95	79
Hay acres converted to pasture	0	17	40	56
Hours of labor	4,481	3,901	3,688	2,872
Average annual net cash income (\$)	31,556	20,489	15,893	(20,522)
Probability of negative cash income (%)	4	13	18	100
Ending equity ratio (%)	88	83	78	38
Probability of lower real equity (%)	75	99	99	100

Not only does a reduction in USFS AUMs reduce the income of individual ranchers, but the rural communities also are impacted. Fletcher et al. took the results from the Wyoming study just described and examined the impact a reduction in the total 105,775 AUMs of grazing allotted to cattle on the Big Horn National Forest would have on the surrounding four-county area. They found that a 25% reduction in grazing would reduce yearly economic activity in the four-county area by \$1.68 million, of which \$441,384 would be personal income for local residents. The communities would lose a total of 30.56 full-time equivalent jobs.

Similar results have been found by other researchers (Torell et al. 1981, Cook et al.). For example, Rimbey et al. found the yearly loss in net income from a proposed reduction of 6,000 AUMs on the Sawtooth National Forest in Idaho was \$90,120 per year.

Loss In Permit Value Equity

To understand the loss in permit value it is first important to understand how western lands were first settled. When agriculture came west, ranchers typically homesteaded the most productive lands; lands that had access to water and land where crops could be raised. Because the Homestead Acts limited the acreage homesteaded to less than what constituted an economically viable operation in the arid west, less desirable lands that were not homesteaded were used in common by grazing animals to supplement deeded forage. After the USFS was organized, grazing permits were allocated to individuals who met the commensurability (e.g., had land in the area to run the livestock on when they were not on USFS land) and prior-use requirements (e.g., had previously been grazing lands that were now under USFS jurisdiction). Ranchers were permitted to run a given number of livestock over a certain period of time each

year. Forest Service lands were incorporated into many ranchers' forage rotations and became an integral ingredient to successful ranching in the arid West.

The possession of a permit to graze on USFS allotments became a valuable commodity. Ranchers were allowed to exchange permits when their base property, water rights, or cattle exchanged hands. A price, known as permit value, was placed on the permit when it exchanged hands. The standard explanation for the existence of permit value is because of underpricing of federal land forage. In other words, the cost advantage of running livestock on a USFS lease compared to a private lease was capitalized into a permit value and ranchers were willing to pay a permit holder for the right to graze USFS lands whenever the ranch, water rights, or livestock exchanged hands. Legal precedent says permit value need not be recognized by government agencies in setting grazing fees (Pankey Land & Cattle Co. v. Hardin, 427 F.2d 43), but permits still exchange at a price among ranchers.

Permit values have been found to exist for reasons other than a capitalized cost advantage for public land grazing. Torell et al. (1992) found that a comparative cost advantage did not exist for many USFS permit holders. Jensen and Thomas found that factors associated with grazing cattle on public ranges explained only 55% of the variation in permit sales value. Similarly, Torell and Doll found that permit values have not provided a consistent estimate of the value of public land forage. Permit value also may measure the value of the USFS permits in providing a complete grazing cycle for the ranch and the economies of size obtained from having the additional forage provided from the permit. In fact, public land ranchers contend their economic viability is related to the economies of size achieved from, and seasonal forage demands provided by, grazing federal lands (Torell et al. 1992).

Researchers have estimated that nearly all federal grazing permits being held by ranchers today have been purchased from a prior owner. Therefore, most ranchers feel they have paid for the right to use federal lands and they are not receiving any subsidy from the government; i.e., the windfall accrued to the original holders of the permit and not to the current holder. When the USFS permanently cuts grazing rights, ranchers lose the equity they have in those permits. Over the 1985-92 period, average permit values were generally in the \$40 to \$60/AUM for northern states (e.g., Wyoming) where seasonal grazing of permits are common, and \$90/AUM or more in Arizona and New Mexico where year-long grazing is most common (USDA/USDI, Torell et al., 1992). A rancher that runs 300 head of cows on USFS allotments for three months of the year stands to lose approximately \$18,000 in equity if he or she receives a 50% reduction in AUMs grazed ($300 \text{ head} \times 3 \text{ months} \times \$40/\text{permit} \times 50\% \text{ cut}$).

Uncertainty surrounding federal grazing policies also has an impact on permit values. Dr. Allen Torell at New Mexico State University has found that the greatest influence on the value attached to grazing permits, particularly State grazing permits, is not the level of the grazing fee in comparison to private forage value, but the uncertainties regarding future policies.

Other Issues

A current research project I am currently involved with is examining the future of livestock grazing on federal lands. We are using a panel of approximately 50 individuals representing the environmental community, ranching community, university professors, and federal agency personnel to project federal land use trends. A major factor identified by this group that will decrease the demand for grazing on federal lands is permittee stress from dealing with public land policy issues.

Many ranchers are faced with expensive battles over proposed reductions in AUMs. The consternation felt by many ranchers is expressed in a decision case I helped write while working in Wyoming. The story is of an actual ranch owner who was fighting the USFS over proposed cuts in grazing. While this is a documentation of an actual case study, names and places were changed at the request of all parties involved. The following paragraph is taken from the published case and while it portrays only the rancher's view, it does allow one to see the frustrations ranchers can feel.

After researching the issues and talking to the Moons, the Pratts, and Tim Pace and John O'Day, Martha felt the USFS was committing a grave injustice against the ranches. Martha said, "How is it possible that 50 years of management, all under the direction of the Forest Service, could suddenly be so wrong that a 50% cut is required?" She also asked, "Why is it that the opinions of two men, both experts in range management, differ so much from Forest Service opinions?" Martha said, "If I thought the Forest Service was really right about range conditions on the allotment I would be happy to cut cattle numbers for a while, but I don't know who to believe and I certainly don't think any permanent cuts are warranted." (Munsell, et al., p. 43).

The last thing I would like to mention is the trade-off between wildlife and livestock. I have heard many comments that livestock need to be removed from the USFS lands to increase wildlife. In most areas, wildlife do not winter on USFS lands, but on private lands. When livestock are removed from federal lands, every AUM on private land becomes that much more essential to the survival of the ranch. This additional pressure does not make for a generous landowner when it comes to allowing wildlife to winter on private property (Van Tassell et al. 2000, Van Tassell et al. 1995). A recent study I did of Wyoming ranchers found that the average operation lost \$4,044 each year from wildlife depredation (Van Tassell et al. 2000). Craven et al. suggest that landowner tolerance, not habitat, may be the limiting factor that imposes population bounds on big game.

I would be the first to admit that in certain areas degradation of public land has occurred from overgrazing, both by livestock and wildlife. I believe, though, that it is in the best interest of society for the USFS and ranching community to work together to keep livestock on public lands. In many areas of the west, I feel this is happening. More damage will be done to public lands if ranchers are forced to sell out to real estate developers than was ever imaginable with livestock. Open space will be lost and wildlife will be endangered.

References Cited

- Cook, C.W. G. Taylor, and E.T. Bartlett. "Impacts of Federal Range Forage on Ranchers and Regional Economies of Colorado." *Colorado State Univ. Exp. Sta. Bull. No. 576S*, 1980.
- Craven, S.R., D.J. Decker, and D.L. Huston. "Farmers' Tolerance of White-tailed Deer in Central and Western New York." *Agr. Exp. Sta. Rep. No. 7*, 1980.
- Fletcher, R.R., G.W. Borden, T.R. Harris, D.T. Taylor, and B.R. Moline. "Comparison of Economic Impacts from Public-Land-Based Tourism and Grazing: A Case Study." In: *Stubble Height and Utilization Measurements: Uses and Misuses*. Oregon State Univ. Ag. Exp. Sta. Bull. 682, 1998.
- Jenson, B.C. and D. Thomas. *Determining Grazing Fees on National Forests: Range and Ranch Problems, Policy Implications and Alternatives for Future Economic Research in Use and Development*. Utah State Univ., WAERC Report No. 9., 1967.
- Munsell, B.R., L.W. Van Tassell, and M.A. Smith. "The Case of the Harmony Basin Grazing Allotment." *Journal of Natural Resources and Life Science Education*. 28(1999):41-47.
- Rimbey, N.R., J.A. Tanaka, T.M. Quigley, M.H. Robison, and J.N. Hawkins. "Importance of Public Land Ranchers: An Idaho Case Study." In: *Current Issues in Rangeland Economics-1994*. Idaho Agr. Exp. Sta., 1994.
- Torell, L.A. and J.P. Doll. "Public Land Policy and the Value of Grazing Permits." *Western Journal of Agricultural Economics*. 16(1991):174-184.
- Torell, L.A., J.R. Garrett, and C.T.K. Ching. "The Economic Effects of Three Changes in Public Lands Grazing Policies." *Journal of Range Management*. 34(1981):373-376.
- Torell, L.A., L.W. Van Tassell, N.R. Rimbey, E.T. Bartlett, T. Bagwell, P. Burgener, and J. Coen. "The Value of Public Land Forage and the Implications for Grazing Fee Policy." *New Mexico State Univ. Agr. Exp. Sta. Bull. No. 767*, 1992.
- U. S. Department of Agriculture, Forest Service and U.S. Department of the Interior, Bureau of Land Management (USDA/USDI). "Grazing Fee Review and Evaluation: A Report From the Secretaries of Agriculture and Interior." Washington, D.C. 1986.
- U.S. Federal Court. "Pankey Land and Cattle Co. v. Clifford M. Hardin and Walter J. Hickel." (District Court No. 7869 and 7870) U.S. Tenth Circuit Court of Appeals, June 1, 1970. Albuquerque, N.M.
- Van Tassell, L. W. and J.W. Richardson. "Impact of Federal Grazing Reductions on Wyoming Ranches." In: *Stubble Height and Utilization Measurements: Uses and Misuses*. Oregon State Univ. Ag. Exp. Sta. Bull. No. 682, 1998.
- Van Tassell, L.W., B. Yang, and C. Phillips. "Depredation Claim Behavior and Tolerance of Wildlife in Wyoming." *Journal of Agricultural and Applied Economics*. 32(2000):175-188.
- Van Tassell, L.W., C. Phillips, and W.G. Hepworth. "Livestock to Wildlife is not a Simple Conversion." *Rangelands*. 17(1995):191-193.

Senator ENZI. Thank you very much.
Mr. McKillop.

**STATEMENT OF WILLIAM MCKILLOP, PROFESSOR EMERITUS,
COLLEGE OF NATURAL RESOURCES, UNIVERSITY OF CALI-
FORNIA-BERKELEY, BERKELEY, CALIFORNIA**

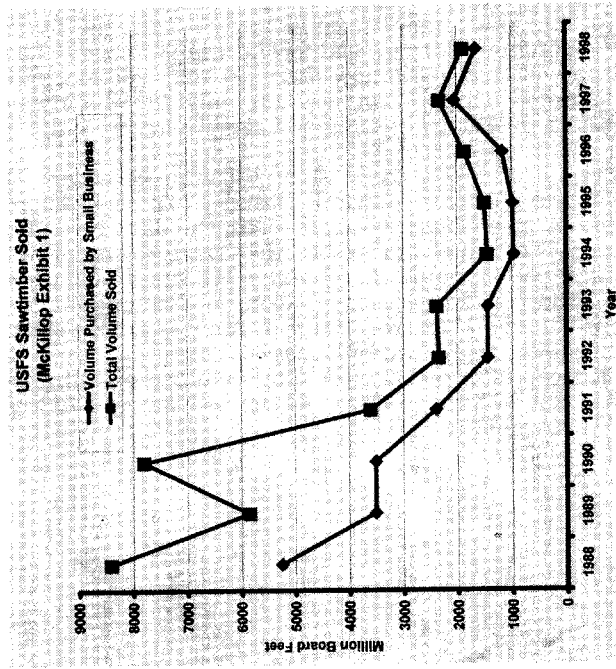
Mr. MCKILLOP. Good morning, Mr. Chairman and Members of the Committee. My name is William McKillop. I am professor emeritus of forest economics at the University of California-Berkeley. My degrees are in economics, statistics, and forest science. I have authored over 100 research publications and conference papers in the area of forestry and natural resource economics.

My statement today is based on my own experience and research, and on data provided to me by a range of organizations, such as the Small Business Timber Council, the Independent Forest Products Association, California Forestry Association, and Inter-mountain Forest Association and Northwest Forestry Association.

My Exhibit 1 shows the very severe decline that has taken place in U.S. Forest Service sawtimber sales in the past decade. In 1988 the total volume sold was 8.4 billion board feet. In 1998 it was only 1.9 billion board feet. That is a 6.5 billion board feet decline, a 77-percent decline in sawtimber sales from the National Forests.

In 1988, small business purchased 5.3 billion. That is 63 percent of the total. And in 1998 they were able to purchase only 1.7 billion board feet.

[The chart follows:]

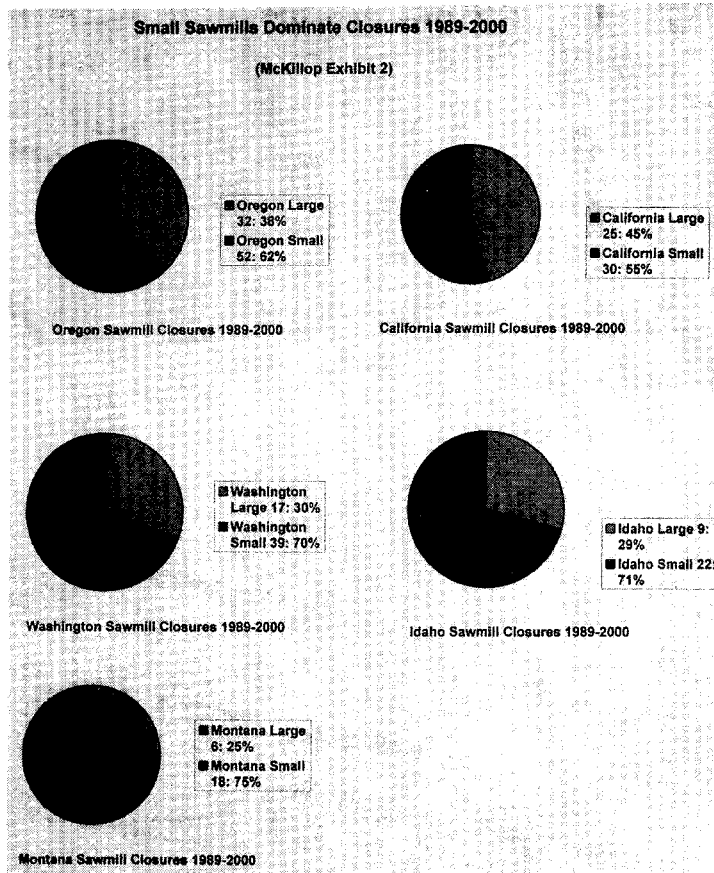


Mr. MCKILLOP. These severe declines have had absolutely traumatic effects on the forest industry, on small timber companies, on working people and communities in the West. In the five-State region of Washington, Oregon, California, Idaho and Montana, there were 494 sawmills in 1989; now there are only 265 sawmills. There were 86 plywood plants; now there are only 48. There were 72 veneer plants in operation in 1989 and now there are only 31 veneer plants in operation.

The severity of this impact is totally unprecedented. Exhibit 2 shows that the burden of sawmill closures has been disproportionately borne by small businesses. The red, the dark color, represents the proportion of small businesses that have closed. You see that 62 percent of the sawmills that closed were small businesses in Oregon; in California, 55 percent of them; in Washington, 70 percent of them; in Idaho, 71 percent; and in Montana, 75 percent of the sawmill closures were small businesses.

For the five-State region, the total number of mills that have closed has been 250 and of those, 64 percent were small businesses. And that is sawmills.

[The chart follows:]



Mr. MCKILLOP. Plywood plant closures—60 percent out of 30 closures in Oregon were small business; 88 percent in Washington were small businesses. In the case of veneer plants, 60 percent in Oregon were small businesses; 80 percent in Washington were small businesses. So there has been very much a disproportionate impact on small businesses of this huge decline in the Forest Service timber sales.

Associated with these sawmill closures have been very, very large job losses. The job losses that have resulted from the closure of small wood processing plants were 57 percent of the total in Washington, 44 percent of the jobs lost in Oregon, 40 percent of the jobs lost in California, 35 percent of them lost in Idaho, and 59 percent of them lost in Montana. Overall there were something like 27,600 jobs lost in wood processing plants in the last decade and of those, 46 percent were resulting from the closure of small businesses.

[The chart follows:]

Jobs Lost due to Mill Closures

1989-2000
(McKillop Exhibit 3)

	Sawmill	Plywood	Veneer	Total	Percent
Washington					
Large Companies	1580	100	125	1805	43
Small Companies	1037	1115	201	2353	57
All Companies	2617	1215	326	4158	
Oregon					
Large Companies	4430	2896	541	7867	56
Small Companies	3157	2360	788	6305	44
All Companies	7587	5256	1329	14172	
California					
Large Companies	3037	290	0	3327	60
Small Companies	2167	0	80	2247	40
All Companies	5204	290	80	5574	
Idaho					
Large Companies	934	215	0	1149	65
Small Companies	627	0	0	627	35
All Companies	1561	215	0	1776	
Montana					
Large Companies	780	0	0	780	41
Small Companies	1125	0	0	1125	59
All Companies	1905	0	0	1905	
FIVE STATES					
	Sawmill	Plywood	Veneer	Total	Percent
Large Companies	10761	3501	666	14928	54
Small Companies	8113	3475	1069	12657	46
All Companies	18874	6976	1735	27585	

Mr. MCKILLOP. These jobs relate only to job losses due to the closure of wood processing plants. On top of that we have very substantial losses in the logging sector. Typically logging firms are small companies and this 6.5 billion board feet decrease, the 77-percent decrease in Forest Service saw timber output has had a devastating effect on the logging industry, as well as on the wood processing sector that I just mentioned.

Lastly, we should note that small business losses due to this Forest Service policy are not just in the timber industry. Typically, the timber industry is a basic sector of any economy, regional or statewide or national economy. It supports jobs in the rest of the economy and the jobs that they support are very much jobs in the small business sector.

So not only do we have the losses in wood processing and logging companies but we also have losses in the rest of the economy due to the Forest Service's severe decline in saw timber output. Thank you, Mr. Chairman. Those are my formal remarks.

[The prepared statement of Mr. McKillop follows:]

**WRITTEN STATEMENT FOR THE RECORD OF
PROFESSOR WILLIAM MCKILLOP
UNIVERSITY OF CALIFORNIA, BERKELEY**

**HEARING ON EFFECTS OF U.S. FOREST SERVICE POLICIES ON SMALL BUSINESS
BEFORE THE COMMITTEE ON SMALL BUSINESS, UNITED STATES SENATE
OCTOBER 4, 2000**

My name is Dr. William McKillop. I am Professor Emeritus, College of Natural Resources, University of California, Berkeley. My degrees are in economics, statistics and forest science. I have authored over 100 research publications and conference papers in the area of forestry and natural resource economics. Prior to joining the UC Berkeley faculty in 1964, I was a research officer with the Canadian Forestry Service. In addition, I have undertaken temporary assignments with a number of national and international organizations, including the United Nations and the U.S. Forest Service. My statement today is based on my own experience and research, and on data obtained from Paul F. Ehinger (Small Business Timber Council), Frank Gladics (Independent Forest Products Association), Charles Keegan (University of Montana), California Forestry Association, Intermountain Forest Association and Northwest Forestry Association.

Exhibit 1 shows the severe decline in U.S. Forest Service sawtimber sales in the past decade. In 1998, the total volume sold was 8.4 billion board feet. In 1998, it was 1.9 billion. In 1988, small business purchased 5.3 billion board feet (63% of the total). In 1998, sales to small business were 1.7 billion board feet (87% of the total). These severe declines have had a traumatic effect on forest industry, small timber companies, working people and communities in the West. In the five-state region, Washington, Oregon, California, Idaho and Montana, there were 494 sawmills, 86 plywood plants and 72 veneer plants in operation in 1989. Now there are only 265 sawmills, 48 plywood plants and 31 veneer plants in operation.

Exhibit 2 shows that the burden of sawmill closures has been disproportionately borne by small businesses. In Oregon, out of 84 closures, 52 (62%) were small businesses; in Washington 39 out of 56 (70%), in California 30 out of 55 (55%), in Idaho 22 out of 31 (71%), and in Montana 18 out of 24 (75%). In the case of plywood plant closures, 18 (60%) out of 30 closures were small businesses in Oregon and 7 out of 8 (88%) in Washington. In the case of veneer plants, 22 (60%) out of 30 closures were small businesses in Oregon and 8 (80%) out of 10 in Washington.

Exhibit 3 shows that there have been huge job losses due to closures of sawmills, plywood plants and veneer plants. Job losses that have resulted from the closure of small businesses were 57% of the 4,200 lost in Washington, 44% of the 14,200 lost in Oregon, 40% of the 5,500 lost in California, 35% of the 1,800 lost in Idaho and 59% of the 1,900 lost in Montana. Overall, 46% of the 27,600 jobs lost in the five-state region resulted from the closure of small

businesses.

The closures and job losses described above represent the adverse effects of Forest Service policies only through their impacts on wood processing plants. Effects due to cutbacks and closures in the logging sector have been extremely severe also. Typically, logging firms are small companies and the 6.5 billion board feet (77%) decline has had a devastating effect on many of them, resulting in closures, cutbacks and job losses.

Lastly, it should be noted that adverse effects of Forest Service policies are not limited only to small businesses in the timber industry. Because the timber industry is a basic sector in most economies, many small companies in the retail, wholesale and service sectors derive part of their business from purchases made by all sizes of companies in the timber industry. Thus the severe declines in Forest Service timber sales levels may have adverse impacts on small businesses that are not in the timber sector. These impacts are indirect but they are nevertheless real.

Senator ENZI. I want to thank both of you for being here today. I am the only accountant in the U.S. Senate, so I have to tell you, I really love the numbers you were using. That is a very critical part of the hearing, too, to have some statistics from some very credible witnesses who are experts in this area that can show some of the devastation. I think both of you have done an excellent job.

Mr. Van Tassell, I particularly appreciate your comments about the wildlife wintering on the private lands and that is uncompensated use. It helps to maintain wildlife in the West, which is something people really expect to see when they come out to the West. We may not be very long from the time that they will make special tours to see a cow.

Ranchers have to obtain operating loans each year. Could you go into a little bit of how the uncertainty regarding the Federal grazing regulations, particularly the allotment restrictions, might impact those loans? Has the Forest Service, in your opinion, made efforts to reduce that uncertainty or has it taken operating loans into any consideration in its decisionmaking? Could you comment on that?

Mr. VAN TASSELL. I do not know that they have taken operating loans into consideration at all but it impacts ranchers like it would any other business. When they go to a banker, if the assets they are using to produce their product are uncertain, the banker is not very willing to give them a loan on that.

The other problem is that historically the grazing permit has held value for the rancher and the rancher has used that for collateral in obtaining loans. With the uncertainty surrounding whether a rancher is going to have those permits to graze, the bankers have been reluctant to use those for collateral. So many ranchers have lost that asset which they had previously used to get a loan; so the uncertainty does impact ranchers.

Senator ENZI. Mr. McKillop, I appreciate again your emphasis on small businesses and how they are inordinately affected. Mr. Hurst mentioned earlier that the small businesses are the ones that buy the ad in the high school yearbook and purchase the 4H animals and they do not have corporate offices in another part of the country, so they have to face those people on Main Street and they are neighbors, they are actually neighbors that are devastated by the changes in business.

Could you give us some of those indications of the magnitude of the impact just in the timber industry?

Mr. MCKILLOP. Yes. I gave you the job losses of 27,600 from wood processing jobs lost. In addition, there must be at least about 10,000 logging jobs lost. So there we have something like 37,500 jobs lost in logging and sawmilling, plywood plants, veneer plants.

Now every job—because the timber industry is part of the basic economy, every timber job supports one other job in the rest of the economy—in retail, wholesale, and service sectors. So you can just about double that number of jobs to get the total job losses. So you have about 37,500 jobs lost in the timber industry but that leads to a loss of another 37,500 jobs in the rest of the economy, therefore, you are talking about 75,000 jobs lost because of this Forest Service policy that has led to the decline in timber harvests.

Senator ENZI. Another thing that, of course, we apply in Wyoming is also the total population impact because each of those jobs represents three other people that are in the family, too. So now we are up around 300,000 people that are being affected by the timber. And, of course, all of those are not in Wyoming but our total population in Wyoming is 480,000 so a small change in forest policy makes a big change in the lives of our people.

Mr. MCKILLOP. It is very destructive to family structures. It leads to break-ups of families or moving them. It is extremely hard on those communities.

Senator ENZI. Again I point to the log over here. One of the comments that was made was that timbering has gotten this bad name in the United States but again they are interested in forest health. It is the future of jobs there, too. And it was pointed out that one of the big differences between a clear-cut, which is never a clear-cut anymore but a clear-cut done by a timbering company and one done by Mother Nature is that the timbering company respects 200 feet from a stream.

So thank you both for your testimony.

Senator CRAPO.

Senator CRAPO. Thank you, Mr. Chairman. I also will be brief because we do want to get our last panel on here in the 8 minutes we have left. So I would just state, Mr. McKillop, I assume that you would agree with the SBA Office of Advocacy's comments to the Forest Service that their proposed rulemaking, particularly on the roadless rule, for example, does have a significant impact on small businesses.

Mr. MCKILLOP. Absolutely. I read the written testimony from the Forest Service, and I think it is totally incorrect to say that these actions will not have an effect on small businesses.

Senator CRAPO. Thank you very much.

I would just ask a question quickly here, and that is, you indicated that there could possibly be more damage to the public lands if we do not properly manage the grazing activities because that would force other uses of these lands, such as development and the like, and I think that was very well stated in your testimony.

Could you also comment on what I see as the flip side of that? Does grazing necessarily conflict with our ability to manage these public lands in a way that will maintain them as strong, healthy forests in the future indefinitely?

Mr. VAN TASSELL. I am not an ecologist but I work with several ecologists and from what I have seen and heard and been around, they are very compatible. The grazing can be used as the management tool. In fact, I know for the sheep industry, some sheep producers are paid to graze some Canadian forests to help the ecology.

Senator CRAPO. Well, thank you. Again we could go into much more and I would like to but we just have a few minutes left and I would like to see our next panel get up here. Thank you very much.

Senator ENZI. Thank you. I do appreciate the expertise represented here.

The next person, our final panel, is Deputy Chief of the Forest Service, Jim Furnish. We appreciate you being here today. I understand that you are missing a major leadership conference in Con-

necticut. I understand that is where Mr. Dombeck is at the moment.

We had the people from out of town come first because they have to travel and they need to deliver their entire testimony. Mr. Harkin and the Democrats have objected to anybody having a hearing of over 2 hours today and it severely limits our capabilities.

We, of course, had hoped that Chief Dombeck could join us and are terribly disappointed that he did not. We will be submitting some questions for him to answer; at this point I will let you begin your testimony.

STATEMENT OF JAMES R. FURNISH, DEPUTY CHIEF, NATIONAL FOREST SYSTEM, FOREST SERVICE, U.S. DEPARTMENT OF AGRICULTURE, WASHINGTON, D.C.

Mr. FURNISH. Mr. Chairman and Members of the Committee, thank you for the opportunity to be here. Knowing you have limited time, I am going to keep my remarks very brief to provide you ample opportunity to ask questions if you would care to.

We have three basic parts of our organization that try to address the needs of small business. One is our State and Private Forestry Organization, which is really our outreach effort to communities and the business community in America. We also have a research community through facilities like our Forest Products Lab in Madison, Wisconsin, that for many decades has sought to work in innovative ways with private business to develop the necessary tools and technology to enable small business to thrive. Then, really, the last is the National Forests, most of which are in the Western United States, where we feel we are inextricably linked, as has been amply testified to earlier, with small businesses and small communities throughout rural America.

With respect to some of the regulations the Forest Service currently has in operation, it is true that we have made the determination that neither the planning regulation nor the roads policy, we feel, has a significant effect on a substantial number of small businesses. However, the roadless policy that is now undergoing final preparation, we did complete an Initial Regulatory Flexibility Analysis and we are proceeding with the assistance of the Small Business Administration Office of Advocacy to address their concerns. We are in preparation of a Final Regulatory Flexibility Analysis to comply with the legal requirements.

I think in summary, I would just say that National Forest lands are experiencing an ever-increasing demand for a variety of uses from a growing and increasingly diverse population. There is a continuous demand for commodity production, along with an increasing demand for recreation, water, wildlife, fish, and other tangible and intangible goods and services.

We realize that there are diverse and many needs and requests to use National Forest System lands. We try to work with small businesses at the local level, as well as with the Small Business Administration to evaluate, resolve, and address the impacts of competing uses on these small businesses.

Some local communities may experience local hardships, as has been testified to earlier. We plan to focus our efforts in these few

communities to help develop community-led efforts to mitigate impacts and help them diversify their economies.

We believe that today the opportunities for job creation in new stewardship industries are immense. Maintaining our existing roads, facilities and recreation infrastructure, reducing fire risk, and restoring watersheds could lead to thousands of high-paying private sector jobs that emphasize ecosystem restoration and forest stewardship.

This concludes my verbal testimony. My written testimony has been submitted. I would be happy to address any of your questions.

[The prepared statement of Mr. Furnish follows:]

STATEMENT OF
JAMES R. FURNISH
DEPUTY CHIEF, NATIONAL FOREST SYSTEM
FOREST SERVICE
UNITED STATES DEPARTMENT OF AGRICULTURE

Before the
Committee on Small Business
United States Senate

Regarding Impacts to Small Businesses from Forest Service Regulations

October 4, 2000

MR. CHAIRMAN AND MEMBERS OF THE SUBCOMMITTEE:

Thank you for the opportunity to discuss impacts on small businesses from Forest Service regulations. Today I would like to discuss our various programs that benefit small businesses and the potential effects on small businesses from the proposed rules for roadless area conservation, national forest management planning and our road management policy.

The Forest Service has a long-standing commitment to work with small businesses on the local level. A majority of National Forest System lands are located in rural communities. As part of a decentralized organization, our employees live in and are part of these very same communities. Therefore, we are uniquely aware of the need to support vibrant, productive small businesses. We currently work with over 5,000 small business entities nationwide to carry out Forest Service programs.

Within the agency, our State and Private Forestry organization provides expertise and resources to facilitate and foster sustainable community development, which benefits small businesses. One example of a program carried out by State and Private Forestry is the Economic Action Program, which is designed to help rural communities and businesses benefit from the work the agency does on federal lands. Two components of this program are rural development and economic recovery. The Forest Service Economic Action Program plays a valuable role helping communities strengthen and diversify their economies through the wise, more complete use of forest resources.

Examples of the technical and financial assistance provided under the Economic Action Program include business planning for new start-up firms for small diameter tree harvesting, processing, and marketing to demonstrate innovative and cost efficient uses for small

diameter timber. Other examples include providing access to new technology; trade networks, and training; and financial assistance opportunities.

In addition, our Research and Development organization has had a long history of technical innovations that ultimately, support small business development. The Forest Service has entered into many cooperative research and development agreements with a variety of small businesses in many technical areas. For example, our forest product laboratory developed technology for circular finger jointing to increase the use of small diameter material for use in construction.

Within the National Forest System organization, we have various programs that benefit small businesses while addressing impacts that may occur from land management decisions. One enterprising effort in the small business arena has been the partnership developed between the Forest Service and the Colorado Small Business Development Center (SBDC). During the last few years the Forest Service, the Colorado Outfitter and Guide Association, and the Colorado SBDC have been working together to develop and implement a business plan geared toward business entities operating on National Forest System lands. The Forest Service considers this business plan to be a national prototype that the agency can use with small businesses in other states. Through the cooperative efforts of the agency and the Colorado Small Business Development Center, Forest Service employees are working more closely with small business entities, and frequently, we recommend the services of the local Colorado SBDC to businesses that wish to operate on National Forest System lands.

We also are participating in regional efforts like the Four Corners Sustainable Forests Partnership. One objective of this partnership is to strengthen and diversify rural economies by supporting community-led projects that achieve forest restoration and create high-value manufacturing opportunities with the by-products. Already this partnership is assisting several small businesses through job training, technology transfer and market development to improve the economics of small diameter timber utilization.

Within the National Forest System, we have also initiated other efforts that support small business interests. The Forest Service recently revised its regulations governing special uses in order to streamline the proposal and application process. This revision provides the framework for the agency to more clearly and effectively identify appropriate uses on National Forest System lands and allows us to be more responsive to all entities seeking a special use authorization.

The Forest Service also works closely with outfitting and guiding businesses on the National Forest System lands. The objective of the Forest Service's national policy is to facilitate high quality commercial outfitting and guiding services that ensure public health and safety, and environmentally sound operations, while fostering small businesses.

On another front, the Forest Service has developed, in cooperation with the Small Business Administration (SBA), a Small Business Timber Sale Set-Aside Program. It is designed to ensure that small business timber purchasers have the opportunity to purchase a fair

proportion of the National Forest System timber offered for sale. The Forest Service adopted the current Set-Aside Program following consultation with the SBA and notice and comment on the proposal published on the Federal Register publication on July 26, 1990.

We also have the Special Salvage Timber Sale Program (SSTS) that operates as a joint program administered by the Forest Service and the SBA (13 CFR 121.6 (c)). This program is independent of the regular set-aside program (section 92), and timber volumes from sales set aside under the SSTS program are not included in the analysis for the regular program. This program provides additional opportunities for small businesses.

New Opportunities

In addition to our current programs, new opportunities for small business may come with implementing the recommendations in the Report from Secretaries Glickman and Babbitt to the President on "Managing the Impact of Wildfires on Communities and the Environment (Report)." In areas impacted by the wildfires this year, the Forest Service rural development program is providing immediate economic assistance to rural communities. In receiving grant or loan applications under this program, we will fully consider the impact of the season's wildfires on communities seeking assistance.

In addition to these immediate actions, the Report recommended making stabilization and restoration investments in areas that have been damaged by fires and which are at risk of erosion, invasive species germination, or water supply contamination. These investments should be made in a manner that provides maximum benefit to hard-hit communities and utilizes local contractors to the maximum extent possible.

The Report is also recommending that forest treatment activities be increased to reduce the risk of fire to communities. These activities can be labor intensive and, once again, the Forest Service intends to involve local communities and the local workforce in implementing these activities.

Part of our actions to implement recommendations in the Report will be to develop and expand markets for traditionally underutilized wood as a tool to enhance efficient use of the removed fuels. Actions will include funding for technical assistance and grants to help develop businesses. Funds will be targeted on technical assistance, training, business plan development, feasibility studies, seed funds for selected capital investments, marketing strategies, identification of value-added income producing opportunities, and applied research.

Proposed rules

To help identify effects of proposed rules on small entities, the agency follows the Regulatory Flexibility Act (5 U.S.C. 601 et seq.), which directs agencies to prepare and make available for public comment an initial regulatory flexibility analysis for rulemakings will not have a significant economic impact on a substantial number of small entities. If the agency determines that a rulemaking will not have such an impact, the agency must make and publish a certification of no significant impact, along with a statement that provides the factual basis

for the certification. All of these are subject to the notice and comment requirements of 5 U.S.C. 553.

The proposed national forest management planning rule and the proposed road management policy have been considered in light of the Regulatory Flexibility Act, as amended (5 U.S.C. 601 et seq.), and it is expected that these rules will not have a significant economic impact on a substantial number of small entities.

Based on the recommendations of an eminent Committee of Scientists, the Forest Service is proposing to revise the existing Forest Service regulations implementing the forest and grassland planning requirements of the National Forest Management Act of 1976. It will base national forest management on the concepts of sustainability and collaboration, and it will integrate science more effectively into the planning process.

The proposed planning rule imposes no requirements on either small or large entities. Rather, the rule sets out the process the Forest Service will follow in planning for the management of the National Forest System. The rule should increase opportunities for small businesses to become involved in both site-specific and national forest and grassland plan decisions. Under the rule, small businesses and other entities may raise issues on opportunities they would like the Forest Service to consider. Moreover, by streamlining the planning process, small businesses should see more timely site-specific decisions that affect outputs of products and services.

The proposed road management rule and policy would revise Forest Service direction on planning and managing the National Forest transportation system. The road management policy is designed to make the 380,000 miles of road in the existing Forest Service road system more safe, responsive to public needs, environmentally sound, and affordable to manage. It places new emphasis on decommissioning, maintaining, and reconstructing of existing roads rather than on building new roads; it requires national forests to conduct an analysis of their existing road system; and it provides additional procedural protections for roadless areas. The proposed rule and policy do not make any decisions on which roads to upgrade, maintain, or decommission. Together, the proposed rule and road management policy will lead to better informed decisions about the national forest transportation system.

In May, 2000 the Forest Service published a proposed roadless area conservation rule and draft environmental impact statement evaluating options for conserving inventoried roadless and other unroaded areas on the National Forest System lands. The proposed rule would: 1) limit road construction or reconstruction in unroaded portions of inventoried roadless areas except in certain circumstances; and 2) require evaluation, during forest plan revision, of whether and how certain roadless area characteristics in inventoried roadless areas and other unroaded areas should be protected in the context of overall multiple-use objectives.

Given the significant public interest in the rulemaking and the comments received on this specific issue during the scoping process, the agency prepared and made available for public comment an initial regulatory flexibility analysis. The Forest Service requested comments

from businesses, communities, trade associations and other interested parties that had information or knew of information sources that would be useful in analyzing the potential economic effects of the proposed rule on small entities.

Since the inception of the rulemaking process, the Forest Service has aggressively sought out the participation of other Federal agencies through an interagency roadless policy team that includes, among many others, the Small Business Administration's (SBA) Office of Advocacy. This active exchange with the SBA and other Federal agencies has assisted the Forest Service in better understanding the concerns of small entities. Most importantly, these concerns have been published and there has been an invitation for public comment. We believe that this is precisely the kind of attention to the concerns of small businesses, communities and other small entities that the Act was intended to foster.

The Forest Service has undertaken a substantial effort to both consider and disclose the potential implications of the proposed roadless conservation rule for small entities. The Forest Service is currently reviewing comments and preparing a final regulatory flexibility analysis to respond to public comments, correct assumptions and include additional data. The final regulatory flexibility analysis is planned for release later this fall in conjunction with the final rule.

Summary

National Forest System lands are experiencing an ever-increasing demand for a variety of uses from a growing and increasingly diverse population. There is a continuous demand for commodity production along with an increasing demand for recreation, water, wildlife, and fish, and other tangible and intangible goods and services. We realize that there are divergent needs and requests to use National Forest System lands. Therefore, we try to work with small businesses at the local level, as well as with the Small Business Administration, to evaluate and resolve the impact of competing uses on small businesses.

We do not expect that the proposed planning rule or the proposed road management policy will have a significant impact on small entities. Impacts from the proposed roadless area conservation rule will be identified in the final regulatory flexibility analysis and the final environmental impact statement.

Even though there may not be significant impacts to small entities, some local communities may experience some hardships. We plan to focus our efforts in these few communities to help develop community-led efforts to mitigate impacts and help them diversify their economies.

Overall, the opportunities for job creation and new stewardship industries are immense. Maintaining our existing roads, facilities, and recreation infrastructure, reducing fire risk and restoring our watersheds could lead to thousands of high paying private sector jobs that emphasize ecosystem restoration and forest stewardship.

Mr. Chairman, this concludes my testimony. I would be happy to answer any questions.

Senator ENZI. Your entire testimony will be a part of the record.

I am going to keep a very close eye on the clock because I am notified that if we do not shut down the hearing by the 11:30 time that the whole hearing is null and void, and we certainly do not want that to happen because we have had some excellent testimony.

I have to say that I want to have more information about why we are nationalizing the National Forests instead of keeping the practices at the local level where there was a local forester who knew what was going on. We have gone to a one-size-fits-all policy in the Forest Service. I can tell you the forests out here do not look anything like the forests in Wyoming, and you cannot manage a forest in Wyoming the way you manage a forest here. Out there we need as much water as we can get. Out here they are trying to drain it off.

I really want to know more about why you are trying to avoid small business input. I was particularly interested in your comment that you are going to comply with the legal requirements. Our interest is not in your complying with the legal requirements. Our interest is in your finding out what small businesses need and trying to interact with them and work with them. When we talk about complying with the regulations, it sounds like you are going to meet whatever you can, staying within any loopholes that we might have built into the law, and that is what we are talking about—passing some additional laws to plug up those loopholes.

I see the yellow light is on and I do not want this hearing to be null and void so we will be providing you with additional questions and you can provide additional comments.

With that, I will adjourn the hearing and leave the record open.
[Whereupon, at 11:29 a.m., the Committee was adjourned.]

APPENDIX MATERIAL SUBMITTED

**Post-hearing Questions posed by Senator Mike Enzi
Committee on Small Business
to Michael Dombeck, Chief, United States Forest Service
Hearing entitled
"The U.S. Forest Service: Taking a Chain Saw to Small Business"**

October 4, 2000

1. In the United States Forest Service's Initial Regulatory Flexibility Analysis for the Proposed Rule on Roadless Area Conservation, dated April 26, 2000, your agency claimed that, because the proposed rule does not directly regulate small entities, the Forest Service was not required to conduct an initial regulatory flexibility analysis. Could you please explain to me how a rule that directly prohibits road building and future access to areas currently considered eligible for multiple use activities, including logging, mining, mineral extraction and recreation could be considered as not directly regulating small entities?

2. The United States Forest Service has made claims that the Regulatory Flexibility Act does not apply to Forest Management Plans, based on the claim that forest plans are not regulations even though forest plans have the effect of law once they are established using a statutorily mandated rule making process. Could you please explain your agency's reasoning for claiming forest management plans are not subject to the requirements of the Regulatory Flexibility Act?

3. One element glaringly absent from the DEIS for the Roadless Area Conservation initiative is an accurate explanation of the impact the proposed initiative will have on the social and economic conditions of surrounding communities. Included in the DEIS are some glaring misstatements such as the comment on page 3-190 of Chapter 3 of the DEIS where the USFS stated, "Regardless of the level of personal investment in the timber industry individuals employed there may have, all can be expected to experience the negative psychological effects of uncertainty regarding forest management, and how it will affect their lives and livelihoods. If Forest Service timber management policies are consistent and reliable, and local communities know what they can expect from the Forest Service, they can adjust, whatever the circumstances. However, if timber management policy keeps changing, people do not know what to expect, and this uncertainty can lead to frustration, a sense of helplessness, economic instability, and a host of other problems resulting in reduced quality of life." While it is understood that a degree of certainty is preferred, and that increased certainty can assist long-term planning, your agency has failed to comprehend one key element about certainty that drives rural economies. The "negative psychological effects" of knowing for certain there is no employment, and no hope of future employment, far outweighs any impact felt by "uncertainty regarding forest management." Clearly, when it comes to feeding your family, the job in hand is much less frustrating than no job at all. Could you please explain the purpose behind this statement in the Roadless Area Conservation DEIS?

4. Also included in the Roadless Area Conservation DEIS is a statement regarding the social make up of forest product dependent communities. On page 3-190, the USFS stated, "Because many timber workers have a highly developed occupational identity and set of job skills, it is difficult for them to quickly and easily adapt to other occupations. . . . Diversifying into other economic sectors, such as the recreational tourism sector, would require a fundamental shift in the individual's sense of identity and social and cultural environment. For loggers, the effects of job loss in the timber industry can be poverty, psychological stress and depression, domestic strain, loss of identity, and associated deterioration of quality of life." Could you please explain the inclusion of this kind of stereotyping of forest products communities and explain how this kind of statement qualifies as an economic analysis of the Roadless Area Conservation Initiative?
5. The United States Forest Service was forced to pay an additional tens of thousands of dollars after many local fire contractors were not allowed to respond to the fires on the Flathead National Forest due to Forest Requirements that the contractors receive fire training earlier in the year 2000. The contractors had not attended the 2000 training sessions after they had received correspondence from the Forest Service which incorrectly stated that fire fighting contractors who had received fire training in 1999 did not need further training for the 2000 fire season. As a result of these actions, the Forest Service was forced to pay out-of-state contractors to transport equipment and personnel to Montana in order to respond to the fires. In fact, I have been told that, throughout the 2000 fire season, Forest Service managers in Montana bypassed local small businesses to hire out of state crews at much higher rates to perform services in which the Forest Service knew local companies were available and capable of responding. Could you please explain how this situation occurred?
6. Could you please explain what actions the United States Forest Service will undertake in the future to ensure that your agency will incorporate social and economic impact and less onerous alternatives to small businesses in all future planning and regulatory activities?

**Post-hearing Questions posed by Senator Mike Crapo
Committee on Small Business
to Jim Furnish, Deputy Chief, National Forest System
Hearing entitled
"The U.S. Forest Service: Taking a Chain Saw to Small Business"**

October 4, 2000

1. You heard testimony that the uncertainty over agencies major rulemakings may have significant impacts on operating loans for many ranchers. Why has the Forest Service not explained the cumulative effect of these rules?
2. The Forest Service has proposed a cost recovery rule that seems to have a disproportionate effect on small business. Do you anticipate that the agency will conduct an initial regulatory flexibility analysis on the cost recovery rule?
3. You have heard compelling testimony that the Forest Service's decisions have had a significant impact on small business. Are these individuals the exception? How is the Forest Service engaging stakeholders in its major rulemakings? What obligation does the Service have to ensure that their concerns are addressed?
4. The Forest Service has been accused of continually limiting access to National Forests. Access is vital to small businesses, whether they are ranchers, outfitters, recreationalists, or timber companies. What has the Forest Service done to improve access?
5. In your brief remarks at the Small Business Committee hearing, you made the following statement:

With respect to some of the regulations the Forest Service currently has in operation, it is true that we have made the determination that neither the planning regulation nor roads policy we feel have a significant effect on a substantial number of small businesses.

Considering the inadequateness of the Initial Reg Flex Analysis, what are you basing this determination on? Without a comprehensive economic analysis, what criteria are you using to make such an assumption? Do I correctly understand your statement to mean that the Forest Service is continuing forth with its proposals despite examples of negative economic impact on small businesses?

6. I am interested in pursuing an independent office of small business advocacy within the Forest Service to approve Small Business Impact and Regulatory Flexibility Analyses before any final regulation leaves the agency. What are your thoughts on this proposal? Please detail the Forest Service's thoughts on expanding SBREFA to include the Forest Service, and giving the Small Business Administration's Office of Advocacy the power to intervene judiciously when Federal agencies violate SBREFA.
7. In its letter dated July 27, 2000, the Office of Advocacy makes several recommendations regarding the roadless rulemaking. Specifically, the Office of Advocacy believes that the roadless rule will have a direct impact on small entities and recommends that the Forest Service fully address the economic impact of the rule in the final regulatory flexibility analysis. Despite evidence to the contrary, does the Forest Service still contend that the effect on small businesses is indirect, and, therefore, not your responsibility? Does the Forest Service intend to complete a full regulatory flexibility analysis? Does the Forest Service plan to require that local Forest Service planners perform a regulatory flexibility analysis in drafting future forest plans that implement the roadless rulemaking? If not why?
8. The Forest Service indicates that a reduction in harvest as a result of the roadless rule could range from 1 to 8 percent? Do you agree that a 1 to 8 percent reduction in harvest could be economically significant to small entities?

As of the date of printing, the Committee had not received a response from the Clinton Administration to the forgoing questions.

COMMENTS FOR THE RECORD



October 3, 2000

The Honorable Mike Crapo
United States Senate
1111 Russell
Washington, DC 20510
Fax: 202-228-0353

Attention: Andrea Bergman

Dear Senator Crapo:

Following are remarks from the BlueRibbon Coalition to be submitted as testimony for the Senate Small Business Committee Oversight Hearing on National Forests' Rules' Impact on Small Businesses scheduled October 4, 2000.

The BlueRibbon Coalition is a nationwide organization representing 600,000 motorized recreationists, equestrians, and resource users. We work with land managers to provide recreation opportunities, preserve resources, and promote cooperation with other public land users. Many of our members are small businesses who depend on access and available recreation opportunities on national forest lands.

All recreation on national forest lands is supported by small businesses. They are retail businesses that sell equipment ranging from trucks, Specialty Utility Vehicles, and camping trailers all the way to backpacks. They are hunting outfitters and snowmobile guides. They are motel owners, gas stations, and cafes. Cumulatively, it is easy to demonstrate that they generate over \$100 million in economic activity in each western state.

In preparation for testimony before the House Small Business Subcommittee on Rural Enterprises, Business Opportunities, and Special Small Business Problems on July 11, I did a cursory survey of five western states, assembling data for only off-highway motorcycle retail businesses and snowmobile businesses (which includes some tourism). These are only selected segments of recreation businesses dependent on national forest lands.

I found that the significant economic activity was generated in the following states for these recreation business segments:

<u>State</u>	<u>Off-Highway Motorcycles</u>	<u>Snowmobiles</u>
Idaho	\$68,569,600	\$151,000,000
Utah	\$71,680,000	\$ 85,099,825
Montana	\$37,800,000	\$103,171,783
Oregon	\$89,968,500	\$ 64,586,075
Colorado	\$86,608,500	\$113,250,000

In 1995, the Department of Agricultural Economics prepared the 1993-1995 Wyoming Snowmobile Assessment Final Report to the Wyoming Department of Commerce. This study found that the estimated total resident expenditure on snowmobiling was \$66.1 million.

Total nonresident snowmobiling, with an estimated 766,332 use days, was found to represent over 50% of total snowmobile use in Wyoming. An average daily expenditure of \$142.40 for non-residents resulted in a total annual expenditure of \$109.1 million. With the multiplier effect, the expenditures by nonresident snowmobilers generated \$189.4 million of economic activity in the state, created \$39.9 million in earned income for state residents, and supported the equivalent of 3,063 full time jobs. This economic activity also generated a total of \$4.7 million in sales tax revenue in Wyoming.

I contacted individual recreation business owners who attested to the impacts that national forest policies have had and could have on their businesses. Two accounts are reported below:

KURT'S POLARIS - SEELEY LAKE, MONTANA

Kurt Friede, owner-manager of Kurt's Polaris in Seeley Lake, Montana, has been in business for twelve years. Seeley Lake is a small town in the western part of the state 56 miles northeast of Missoula. It has about 3,400 residents year-round, and about 7,000 when seasonal home owners arrive in the summer.

Kurt's Polaris is the largest Polaris dealer in Montana, selling snowmobiles, ATVs and Victory motorcycles, as well as used dirt bikes. The business has five employees and annual gross sales of approximately \$2.5 million.

Kurt notes that the closure of 500 miles of old logging roads in the nearby Lolo National Forest is definitely bad for business. "People have few places to ride anymore. We have thousands of miles of roads that are now closed; the average person won't even be able to take a drive into the national forest."

Kurt continues, "First it was the grizzly bear, then the bull trout, and now the lynx. Our local snowmobile club, the Seeley Lake Driftriders, worked with the Forest Service last winter and helped them find all the lynx that are around here. We thought they'd realize since we've snowmobiled around the area for years, that we had no impact on the lynx. Not so. Our help has been rewarded with proposed closures. The grizzly population has grown so that there is not room for all of them in the forest anymore. We've had one wandering around the neighborhoods this summer getting into garbage cans."

Kurt condemns the extremists who advocate closures, "I wonder who they think they're saving it for. They're not thinking clearly into the future. Tomorrow they may be physically deprived and won't be able to get there either. They're saving it for something that doesn't exist. 95% of our national forests must be open for 95% of the population."

CLIFF'S SAW & CYCLES - BAKER, OREGON

Kip Farmer owns and operates Cliff's Saw and Cycles, a business founded by his father, Cliff Farmer 42 years ago. It's located in Baker, Oregon, a community of 10,000 in the eastern part of the state. Cliff's Saw and Cycles sells chain saws, and Honda motorcycles and ATVs. Kip notes ruefully that the chain saw part of business has been nearly wiped out due to restrictive public land policies that have nearly eliminated logging on the nearby national forest. Cliff's Saw and Cycles employs seven, including his mother who is still active in the business. It has a gross sales of approximately \$2.5 million a year. Kip estimates that 75% of his sales depend on recreational access to the old logging roads and trails in the national forests.

Kip is an active volunteer in working with the national forest to maintain trails, and says, "Many of my customers are retirees, veterans who have fought in wars and served their country. As their physical abilities have declined, an ATV gives them mobility, and the ability to still enjoy the outdoors. They've served their country. Now, their public land should be open for them to enjoy."

The Regulatory Flexibility Act (RFA) requires agencies to consider the impact that proposed rules will have on small entities. Agencies are required to prepare an initial regulatory flexibility analysis (IRFA) for those proposed rules expected to have a significant impact on a substantial number of small entities. The IRFA must identify the impact of the proposed rule on the entities and suggest how this impact can be mitigated. This analysis must be published with the proposal for public comment.

The Forest Service has generally evaded its responsibility under RFA by claiming that proposed rules do not directly regulate small entities. The agency claims that planning does not constitute regulation.

This evasion, if successful, offers small businesses no recourse under RFA. Land management agency planning is a tiered process whereby general programmatic rules are established in an overall management plan. National forest management plans are an example, as is the Interior Columbia Basin Ecosystem Management Plan and the current Clinton-Gore Roadless Initiative. Site-specific actions that implement the programmatic rules are tiered to the general rule.

Site-specific actions can significantly regulate small recreation entities by issuing decisions that, for example, close roads, trails, and eliminate recreation facilities. These individual actions are where direct regulation occurs. They are the result of programmatic decisions. RFA must be applied to the Forest Service at the programmatic level where the actual direction is issued, not on the ground where the implementation occurs.

An IRFA was prepared as a part of the DEIS for the Roadless Initiative, but impacts to recreation related businesses were omitted from the discussion. The review was, therefore, inadequate. I reported on this lapse in my testimony at the July 11 House hearing. I subsequently discussed this lapse with SBA's Office of Advocacy while I was in Washington. They appeared to agree that recreation related businesses did have a significant stake in national forest management policies.

Shortly after the House hearing, the SBA's Office of Advocacy submitted comments on the Roadless DEIS. Those comments also failed to address recreation related businesses. I am vexed and puzzled by this lapse, especially since I met with the officials preparing the comments. I specifically request your inquiry into this omission.

Clearly, the Forest Service cannot continue to engage in their apparent effort to socially plan and remake rural society without considering the consequences to small entities and reporting those results to Congress. Without specific direction from Congress, they will likely continue to evade this responsibility. While we are not anxious to increase the regulatory burden on the agency, the agency must acknowledge the ruinous burden their policies can create for small businesses.

Sincerely,



Adena Cook, Public Lands Director
BlueRibbon Coalition
P.O. Box 1427
Idaho Falls, ID 83403
Phone: 208-524-3062; Fax: 208-524-2836
e-mail: bradena@sharetrails.org

Town of Eureka
PO Box 313
Eureka, MT 59917

9/25/2000

To whom it may concern

I would like to take this opportunity to highlight some of my concerns about the effects that public forest policy has on small companies.

The tide of public sentiment has changed over the past 20 to 30 years. Once what was considered a noble profession is now on the threatened and endangered species list. The logging community continues to take the harsh criticism of being environmentally unfit. They are continually criticized with sensationalistic types of propaganda from a critic that has a goal in mind of zero cut on federal lands. All the time we see our forest in bad need of care and management. Continued build up of dead, dying, and diseased trees has lead to one of the most costly and devastating of fire season in the northwest. Millions of acres of federal land have been turned into wastelands that, for the near future, will be non-productive.

In order to keep a mix of treatments to our federal lands the forest managers need to keep timber harvest as a tool, along with prescribed burning and thinning from below. This requires the infrastructure and people be in place to maintain a system of utilization of the by- products from the lands. The infrastructure takes a considerable amount of capital investment and can not be set up in a moment's notice. The sawmills and equipment must be in place and must be able to be productive on a year round basis.

The continued strangle hold on timber supplies makes it an uneasy investment for any company to make. One never knows where and how you will get your next load of raw materials.

To look at this from my prospective, a town the size of San Francisco, California with a population of 795,000 and an area population of 6 million can loose 3,000 jobs and not even notice the change in the traffic pattern. A town the size of Eureka, Montana with a population of 1,000 and an area population of 4,000 can NOT loose a 100-person sawmill without disastrous ripple down effects throughout the area. With the loss of a sawmill the forest managers also loose one of the key elements of the timber management process.

The bottom line is that forest policies and public sentiment are such that we continue to see mills and logging decline to an all time low. We continue to see our national forest become diseased and rotted and we will continue to see more frequent and harsher fire seasons in the future. Yet there is still the demand for the paper, lumber and timber products. If we as a country try to be environmentally conscious we also need to be committed to a conservation mentality and we as consumers need to practice what we preach. In the mean time we need to be managing our national forest and not letting them go to waste.

Sincerely

A handwritten signature in black ink, appearing to read "Craig D. Eaton", with a stylized flourish at the end.

Mayor Craig D. Eaton

Oct. 2, 2000

To Whom It May Concern -

Effective today there are 60 fewer employees working at Owens and Hurst. This layoff was a direct result of poor market conditions, and a shortage of timber to run the mill at normal capacity. In a small community such as ours, a layoff of this magnitude has a drastic effect, not only on the affected employees and their families, but also on our local business community. As one might expect, morale in our community at this point is extremely poor.

In my opinion the reasons for this layoff are entirely politically motivated and directly related to policies of the present administration in Washington. On the Kootenai Forest alone where we purchase the majority of our raw material, there is an estimated 400 mmbf of annual mortality alone, yet for the past couple years the Forest has only managed to sell a dismal 52 mmbf. Is it any wonder the year 2000 was such a catastrophic fire year with this amount of fuel left to decay on the floor of the Forest.

On top of the estimated annual mortality

...we're now faced with an estimated 100-150 mmbf
 ...of fine salvage (in our area alone) which
 ...needs to be accomplished immediately in order
 ...to rehabilitate the areas ravaged by the fires;
 ...yet to date the Forest Service is sitting
 ...on its laurels waiting for direction from
 ...the chief in Washington D.C. While they
 ...wait * the timber deteriorates, the silt runs
 ...and our community and way of life suffers.

...Market conditions can also be directly tied
 ...to politics. Canadian and European imports are
 ...the leading cause for the decline in finished
 ...lumber prices. What has NAFTA done for
 ...the American worker since inception by this
 ...administration? Why should sawmill workers in
 ...Eureka, Montana face unemployment and welfare
 ...while their counterparts in these foreign countries
 ...still hold jobs and can provide for their families?

...America used to be symbolic as a place
 ...where the average person had the opportunity
 ...to work hard and realize their dreams, but
 ...today in Eureka, Montana it's extremely difficult
 ...to make ends meet, let alone realize any dreams.

...I really feel much better though, knowing
 ...a millworker in a foreign country is realizing
 ...his.

Sincerely
 Alayne Finch
 1920 Homestead Road
 Rexford, MT. 59930

October 1, 2000

Dear Congressmen,

As a 50 year old native Montanan I have observed a lot of change through out our state and nation. Change is an integral part of life. But some of the changes I see amount to a slow form of death ... to our independence as a nation and freedom as individuals.

Now I'm aware that you, our elected representatives have a huge responsibility in protecting our country from harm. And - I'm certain you hear countless views and differences of opinion on what is best for all in this land. It is my hope that today you will just listen to the dilemma facing the Timber industry and from ~~that~~ you will take the necessary steps to remedy the harmful policies that are now in effect. Because - it ~~shall~~ is already be too late to save the homes, lives, and timber lost in the wildfires of this past summer. But we could bless future generations with healthy forests and thriving economies without our being dependent on foreign countries.

for our resources.

This dispute over the changing Policies concerning Management (or mis Management), depending on your point of view - of our National Forests has been an eye opener for me. As a college student I took ecology and economics - not realizing our Country would have such a lack of balance between the two.

As these issues are faced, I see the local citizens being ignored. Even though those who work in the timber industry have the real story on what is happening to our forests - they are turned out. Often in positions of leadership that are crucial to the health of our land down home - appointments are made from the Top down. Men who have never spent a day logging are put in charge of the harvesting of timber. I call this the "Blind leading the Blind." It's just as backward!

The views of the timber industry have been projected in peaceful, logical, and yet powerful ways. However - it appears that those who choose to do violent demonstrations get more media coverage - I believe though that they will not be more successful with our representatives.

Our son, a fourth generation member of the timber industry, can go to a Mountain near our home and behold an area logged in the early 60's by his grandfather. Except for lack of dense underbrush and "dead falls" (blow down trees), that provide such good fuel for Forest fires - there is no obvious sign that this "pristine" area - was ever harvested.

Because our son knows the importance of good stewardship of the land - he has chosen to work at the same mill his father has been employed at. Both my son and my husband of 30 years stand to lose their livelihood if the mill can't

find a good supply of logs that are not tied up in some way.

In our nearby Kootenai National Forest there is a 300 million board feet annual mortality rate - this is of usable timber that, if harvested early, would be a boost to our economy in every way. We would be able to keep our independent mills running just by logging the dead wood!

Clearly the people who maintain their livelihood from logging here in Montana are intelligent and caring enough to provide a quality life style for coming generations.

I've seen Owens and Hurst Company diversify - and do most anything to provide lumber for our country. And yet, as I write this, our global market has been flooded with Russian, Canadian, and European countries timber. So right now the market is at an 8 year low.

us as a nation cannot compete now,
largely because of restrictions placed on
National Forest land. Are we striving
to become dependent on other countries
for wood products?

Will we not be allowed to use even
the burned timber that was successfully
hid on?

Maybe it is just as well that my
deceased father didn't live to see what
is happening... but my children will
be living with the choices our government
is making today. Will that amount
to tying up our "land of the free"
and making our "home of the brave" dependent
on other countries of the world for resources
we could produce if our hands weren't
in chains? It's up to you.

Thanks for listening

Shirley May Johnson

406-882-4347

P.O. Box 301

Fortune, MT
59918



www.westernland.net

September 27, 2000

Mr. Del Tinsley
Wyoming Livestock Roundup
P.O. Box 850
Casper, WY 82602

RE: Federal Grazing Lands

Dear Del:

I was pleased to learn of your invitation to testify before the Senate Committee on Small Business hearing entitled "The U.S. Forest Service: Taking a Chain Saw to Small Business." I know you we represent us well, but I would like to share some of my thoughts and experiences with you.

I've been a licensed real estate agent in the State of Wyoming for the past 32 years, and have specialized in farm and ranch real estate for the last 15 years. So I have seen restrictive regulations placed on federal grazing lands by U.S. Forest Service grow beyond belief. These regulations are having a direct negative affect to livestock operations as well as timbering and mining operations, that I think go far beyond the understanding of Congress and the Forest Service Agency.

The affects are not limited to only the profitability of individual ranchers, their production value of their real estate and loan limits and policies of ag lenders. But, can also reduce the tax base in the county, sales by merchants in the trade area, which in turn affects everyone in the community. It's a never-ending cycle!

I have repeatedly seen the rancher sell because of continuing operating losses due to cuts in carrying capacity, increased operating expenses, and/or changes in lender's loan policies. When this occurs, other livestock operators are unable to be competitive buyers for the same reasons. It's no longer a viable operation!

Who then buys the property? Well one of two scenarios will play themselves out. Either the ranch is sold to an investor not necessarily needing to make profit, which in turn takes the property out of agriculture production. Or, it is sold at a reduced price to compensate for defects caused by the regulations. Either way our agricultural communities are most often affected in a negative manner.

May your trip be a safe one!

Sincerely,

J.R. Kvenild
Broker

CASPER
J.R. KVENILD JRK/cpu
Del Tinsley
280 Valley Dr.
Casper, WY 82604
307-234-2211
Fax: 307-237-0045
Email: jr@westernland.net

LARAMIE
Tom Hall
214 Sheridan Ave.
Laramie, WY 82070
307-742-8380
Fax: 307-721-4028
Email: tom@westernland.net

CODY
Bob Boile
1128 12th St.
Cody, WY 82414
307-587-8014
Fax: 307-587-9700
Email: bob@westernland.net

TOWN OF REXFORD

BOX 100

REXFORD, MT. 59930



To those whom are concerned and those who are not,

I am writting in regards to the current U.S. Forest Service Timber management policies and the impact which they have had on our community and my own personal life.

I was born to a rancher, who lived on a ranch bordering Rexford, until the Libby Dam forced the relocation of the town and surrounding area in the early 70's. I have been involved in the logging business since 1970 and for over 25 years my livelihood depended on the resources of the National Forests. Due to poor timber management and timber sales cutbacks my logging career became economically impossible. As of July of 1996 I have been employed as a mechanic at Owens and Hurst Lumber Company, one of our local sawmills, and now again my family and I are facing our livelihood being threatened. We are not the only family who have been affected by the fall of the timber industry due to the timber management policies. Our entire community and area taking in several small towns is growing closer to devastation with each passing day.

This summer, catastrophic wildfires swept through our mountains and valleys, filling the air with acrid smoke, charring the countryside and threatening homes and wildlife.

Because of current timber management policies, which are responsible for enormous amounts of wasted, merchantable timber, the fuel load was built up to dangerously high levels causing the intensity of the fires and unwarranted waste of our natural resources. There is still a glimmer of hope for doing the best we could possibly do to rectify this tragedy by harvesting the salvageable timber and implementing silviculture practices. Thus keeping the timber industry going and supporting the community and maintaining and caring for our timber lands.

This issue we are facing concerning the Timber industry and the management of our Forests is not just about having a CAUSE, it is about LIVES, JOBS and FAMILIES trying to survive and keep food on their tables. Yes you could say it is a life and death situation! Have people grown so cold and noncaring that they no longer care about PEOPLE and their livelihood???

Bill F. Marvel

Bill F. Marvel
Mayor
Town of Rexford

Small Business Committee Hearing

U.S. Forest Service: Taking a Chainsaw to Small Businesses

Thank you Mr. Chairman, Senator Enzi, and the other members of the committee. I am honored to have the opportunity to testify before you here today. I am a small business owner in Colorado Springs, Colorado. I want to preface my comments by saying that the character and the nature of public land management has changed over the last several years. In the past, as you know, the emphasis was on managing the lands for the good of all people. People who live in the West use public lands for subsistence ranching, grazing, mineral extraction, recreation, and harvesting of our one great truly renewable resource - lumber.

In the early to mid 1970's, as self-proclaimed environmental groups like the Sierra Club stepped up its pressures to eliminate logging, mining, grazing, and ranching on public lands, the focus of public land managers changed to recreation. Recreation now represents the single largest industry that relies on access to our public lands for their continued existence. It is with this backdrop that I would like to begin my testimony.

I believe in the American dream. I believe that if an individual has a dream, and is willing to work hard toward his goals he will be able to succeed. My dream was the dream of small business. I purchased my business license in November of 1985 and began repairing and modifying Jeeps in my garage. By 1986 my reputation and

customer base had grown enough that I was able to rent a small shop in Colorado Springs. In 1988, I was able to hire 3 people to work for me. In April of 2000 I was able to purchase my own building and hire 6 full-time employees and 1 part-time employee.

People come to my shop to have their 4-wheel drive vehicles modified so that they can drive on the roads and trails within the National Forest System. Ninety-nine percent of my business comes from people with families who enjoy going into the backcountry, as a family, to camp, fish, hike, picnic or just to enjoy the peace and the beauty that the state of Colorado has to offer.

As a small business owner I rely, and my employees rely, on continued access to public lands for our livelihood. Loss of access to our public lands would have a catastrophic effect on my business and on the lives of those people who looked to me for their source of income.

While loss of access would affect me directly, the effect is not limited to just myself and 7 employees. Rather, the loss of access impacts thousands of people employed by the wholesalers, jobbers, manufacturers, fabricators and distributors who rely on my orders, and others in this business, to maintain their profitability and support their employees.

The U.S. Forest Service has certified, as required by the Regulatory Flexibility Act¹, that

¹ Regulatory Flexibility Act §605(b), 5 U.S.C. 601.

its Road Management Proposed Rule² will not have a significant economic impact on a substantial number of small entities.³ However, the Environmental Assessment (EA)⁴ undertaken by the agency does not support this certification.

The U.S. Forest Service has 373,000 miles of System Roads within its jurisdiction nationwide.⁵ The agency claims it can only afford to pay for maintenance on 20% of these roads.⁶ The EA states that no decommissioning is proposed for roads that carry passenger vehicles.⁷ Twenty percent (20%) of the roads carry passenger vehicles and 80% of the roads either carry 4-wheel drive, high clearance vehicles, or are closed. Since the agency has stated it will NOT decommission any roads that carry passenger vehicles, and it can only afford to maintain 20% of its roads, then the roads that will be decommissioned are the very roads that my customers use for recreation.

Therefore, when the Forest Service decommissions 80%, or 287,300 miles of System Roads through this Road Management Rule, I am faced with a catastrophic loss in

² Notice of Proposed Rulemaking, 65 Fed. Reg. 11680 (2000) (to be codified at 36 C.F.R. pts 212, 261 and 295)(proposed March 3, 2000). See also <http://www.fs.fed.us/news/roads/>

³ Notice of Proposed Rulemaking, 65 Fed. Reg. 11681 (2000) (to be codified at 36 C.F.R. pts 212, 261 and 295)(proposed March 3, 2000).

⁴ National Forest System Road Management Strategy, Environmental Assessment and Civil Rights Impact Analysis, U.S. Dept. of Agriculture, Forest Service, Washington, D.C., February 16, 2000. See also <http://www.fs.fed.us/news/roads/DOCSfinaldraftEA.shtml>

⁵ Coghlan, G.; Sowa, R. 1998. National forest road system and use (draft). Engineering Staff, USDA Forest Service, p. 9. See also, <http://www.fs.fed.us/news/roads/roadsummary.pdf>

⁶ <http://www.fs.fed.us/news/roads/qanda.shtml#General> See. #4

⁷ National Forest System Road Management Strategy, Environmental Assessment and Civil Rights Impact Analysis, U.S. Dept. of Agriculture, Forest Service, Washington, D.C., February 16, 2000. Page E14. See also <http://www.fs.fed.us/news/roads/DOCSfinaldraftEA.shtml>

business because nearly 100% of all 4-wheel drive and high clearance recreation roads will be decommissioned. Without places to ride, my customers have no need for customized 4-wheel drive vehicles and therefore have no need for my services. If my customers have no need for my services, I in turn have no need for the services of the wholesalers, jobbers, manufacturers, fabricators and distributors I mentioned above who rely on my orders. And I am just one shop in one state among the substantial number of thousands of shops in 50 states that will be affected by this rule. The U.S. Forest Service is not *just* taking a chain saw to our small businesses, it is taking a chipper shredder to our livelihoods and leaving us with nothing but the decay of lost jobs.

As our population continues to grow older and is required to work more hours to make ends meet, time for recreation is diminishing. The clear trend for recreation in our national forest is moving towards motorized use. Whether by sport utility vehicle, all terrain vehicle, or motorcycle, the growing trend and mode of choice for transportation is motorized.

The trails systems in the National Forest need to be expanded not reduced. Additional expansion of the trail system within the National Forest System will relieve the impact on any single given area, will reduce the stress on wildlife and would allow for a trail system rotation while providing access to a growing population using the National Forest. Expansion of our trail system will improve the economy of small businesses instead of destroying them.

I am so committed to the issue of access that each year I personally use a portion of my profits to support our public lands. This past year alone I organized, with the help of others, work parties of volunteers to go onto Forest Service land, reclaim riparian areas, close off unauthorized trails, re-seed impacted areas and remove trash and debris from the Wildcat Watershed. In fact, this year we put in over \$10,000.00 and more than 4,000 man hours in materials and labor to help maintain our access to our lands.

We are committed to continue this support. Access to the National Forest and our public lands is not just necessary for my business, it is also part of the Western Heritage, the Western way of life and an inseparable part of my life.

Jerry Panek
Owner, Predator 4WD, LLC
4260 North Nevada Ave.
Colorado Springs, CO 80907
719 528-5790

U.S. SENATE

To Whom It May Concern:

I am writing this letter, to voice my concern on the upcoming Clinton/Gore Road Less Initiative and current management of our national forests. I am deeply concerned about the decreasing availability of access to our national forests here in of Montana. It seems like every time that you go to the Woods for recreation, hunting or fishing. There is a new gate or a gate closure.

As a veteran of 23 years, of service to my country, in the United States Marine Corps, where I served in numerous conflicts, which include (but are not limited to) Viet Nam, Beruit and Desert Storm. When I retired from the Marine Corps in July of 1991, I was the most highly decorated helicopter aircrew man in the Marine Corps. In 1995, the Marine Corps Aviation Association named an award in my honor. It is called the Danny Radish Award. The award is for the most outstanding enlisted aircrew man of the year. So with that little bit of background, I feel that I can speak for most of my fellow veterans. When I say that it feels like, the country that I fought for, is now trying sbut me out of the Land that I fought for and love so dearly. With the number of road closures and future road closures, it will restrict many senior citizens (veterans) and people with minor disabilities, who can no longer do a lot of walking, from being able to see or utilize this beautiful part of the country.

I also, now work in the timber industry and the constant fear of being unemployed is always there. With all the cut backs and Lumber Mill closures in the last few years. It should be apparent to all. That the Clinton/Gore road less initiative would be just another big nail in the coffin, of the small businesses in the state of Montana.

Respectfully Submitted

Danny Radish
Danny Radish

Comments for Consideration
 RE: Senate Hearing
 USFS Regulations - Adverse Impacts on Small Business

From: Thoman Ranch - Southwestern Wyoming Ranchers
 Mary E. Thoman, HC65 Fontenelle Route, Kemmerer, WY 83101
 307-877-3718; mthoman@hamsfork.net

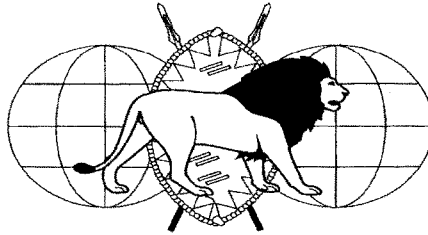
Endangered Species Act: This act alone has cost our family ranching operation over \$50,000 in actual loss of breeding sheep and market lambs during the past five years. Indirect costs due to having to hire additional labor; making extra trips to the Forest Allotments; travel expense and abuse of vehicles due to increased trips; and reduced weaning weights due to stress could easily total an additional \$50,000. Most Forests are being managed as if they were in the Situation 1 areas for grizzly bears when in fact they are not. All forest permits and annual operating plans now include 5-10 additional pages of micro-management criteria that operators are forced to comply with; i.e. where dog dishes and horse feed shall be placed, etc.

Colorado Cuthroat trout, Mountain lions, mountain plover, sagegrouse, wolves, Big Horn Sheep (not a listed species but being treated as such) are all controlling the use and management (or mismanagement) of our federal lands. The multiple use concept is being replaced with a "preservationist" approach. As a result renewable resources such as grass and timber are not being harvested which in turn leads to wild fires and wasted resources.

****In the meantime, the small businesses who are trying to make a living and support the tax base are being forced out of business with cumbersome laws, monetary losses, and overwhelming public meeting time losses.**

Road Closures: The impacts of this latest action have not been fully implemented by the USFS as of yet. This Act will not allow good forest service managers the latitude to use "common sense" in managing the resource. For example, sheep camps will be parked according to a predetermined map and schedule. This does not allow the flexibility to place the camps off-road where they will not be in conflict with the general public. The exact timing and positioning of camps and the prerequisite "special permits"—if and when allowed—will create great hardship on the USFS managers as well as livestock permittees and animals. This will also preclude managing the land according to current weather trends and feed availability. There will be no flexibility for good resource management decisions. As now, unseasoned USFS managers, take over, the computer will become the manager. The resource will suffer as a result.

The last wave of road closures caused great hardship to our operation. For example, the most accessible road on one of our allotments was closed. The roads left in place included a loop through a swampy meadow (causing resource damage or unuseable road); a winding timbered road; and a very siding mountainside road which were totally inaccessible to sheep camps. This will require the use of tents, extra men and horses, and extreme danger due to exposure to grizzly bears and wolves.



SAFARI CLUB INTERNATIONAL
 441-E Carlisle Dr., Herndon, Virginia 20170
 Ph. 703-709-2293/ Fx. 703-709-2296

**TESTIMONY ON THE SMALL BUSINESS IMPACTS OF
 U.S. FOREST SERVICE POLICIES
 SUBMITTED BY SAFARI CLUB INTERNATIONAL
 TO THE SENATE SMALL BUSINESS COMMITTEE
 FOR THE OCTOBER 4, 2000 HEARING**

Safari Club International would like to thank the Committee for giving us the opportunity to submit this testimony regarding the impact of the U.S. Forest Service policies on small businesses, including those related to recreational activities such as hunting and trapping.

As you may know, hunting is important to states economically on several levels. If U.S. Forest Service Policies, such as the new roadless proposals and the management plans that limit road maintenance, negatively impact the access hunters have to Forest Service land, then small businesses and state fish and game departments will be impacted as well. Small business owners that depend on hunters will be deprived of their livelihoods, and

states will be impacted by a decrease in the funds they depend on to monitor wildlife, preserve habitat, and protect threatened species.

Millions of dollars are expended annually by hunters on small businesses that sell everything from firearms and ammunition, to tents and camping equipment, to clothing.

Hunters also spend money at locally owned restaurants and hotels as well as any number of other non-hunting related businesses such as grocery stores, pharmacies, car rental, and pubs.

Many of the small businesses that would be affected by Forest Service policies that negatively impact hunters are those belonging to guides and outfitters. Most guiding and outfitting companies are run by just a few individuals who depend on seasonal bookings to make money that they live on for the whole year.

Hunters also bring in millions annually to states via taxes on hunting equipment, firearms, and bow-hunting equipment. The initial tax, known by the legislation enacting it – Pittman-Robertson - was first levied in 1937. Since that time, over \$3 billion have been generated to states. These funds have been responsible for the most successful wildlife conservation programs in the United States. It is because of hunters' dollars that species like the white-tailed deer, the wild turkey, and big horn sheep now number in the thousands and millions in this country, when only decades ago they were on the brink of extinction.

On top of the funds generated from Pittman-Robertson taxes, states also receive millions of dollars annually in the form of hunting licenses, tags, and permits. This money further allows state fish and game departments to preserve habitat, monitor species, and continue projects designed to conserve wildlife in America.

To highlight the financial impact that Forest Service Policies would have if they negatively affect hunting access on National Forest land, we have provided you with some numbers from the 1996 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation.

First, in the State of Wyoming, in 1996 hunters, both resident and non-resident, were responsible for \$148,830,000 total expenditures. \$92,869,000 was "trip-related" and the rest, \$55,961,000 was "equipment and other." It is from the money in this latter figure that any Pittman-Robertson funds would be generated for state conservation of wildlife.

In Idaho and Montana the figures are even higher: \$246,139,000 total expenditures by hunters in Idaho in 1996; \$215,878,000 total expenditures by hunters in Montana. Collectively, these numbers total over half a billion dollars in money from hunters in one year in three states with heavy reliance on natural resource based industries. These three states are all over 50% owned by the Federal government and much of that is Forest Service land.

As other small businesses such as timber harvesting, stockgrowing, and mining continue to decline in Western states like Wyoming, Montana and Idaho the economic percentages that sportsmen and women represent in these states grows. The negative impact that Forest Service policies could have on hunter access and then ultimately hunting-related small businesses and state governments can not be ignored.

Thank you again, Mr. Chairman for the opportunity to present the sportsmen's side of the issues, and for holding this hearing which further examining Forest Service policy impacts on small businesses. We look forward to working with you on future issues of concern.



Cooperative Extension Service
College of Agriculture
Department of Agricultural and Applied Economics

P.O. Box 3354
Laramie, WY 82071-3354
Phone: 307-766-2386
Fax: 307-766-5544

THE COST OF RURAL COMMUNITY SERVICES IN WYOMING

David T. Taylor
Roger H. Coupal
Dept. of Ag and Applied Economics
University of Wyoming
June 2000

THE COST OF RURAL COMMUNITY SERVICES IN WYOMING

Introduction

Many areas of the Rocky Mountain region have experienced rapid population growth in recent years. Much of this growth has been associated with an influx of in-migrants from outside the region. While population growth for the State of Wyoming was 6.0 percent between 1990 and 1998, this growth was not evenly distributed. For example the population in Teton and Sublette Counties increased by 28.6 percent and 18.5 percent, respectively, between 1990 and 1998. Much of this growth has occurred in rural areas of these counties. In Teton County 62.9 percent of the total population increase between 1990 and 1998 was in non-incorporated areas of the county. In Sublette County 76.1 percent of the total population increase between 1990 and 1998 was in non-incorporated areas of the county.

Teton and Sublette Counties have also experienced a decrease in agricultural lands during this time period. The Census of Agriculture (U.S. Department of Commerce, 1992 and U.S. Department of Agriculture, 1997) reports a 9,937 acre decrease in agricultural land for Teton County between 1992 and 1997 and a 975 acre decrease in agricultural land for Sublette County between 1992 and 1997.

The average cost per person for county government was also relatively higher in Teton and Sublette Counties. The Cost of Maintaining County Government in Wyoming (Wyoming Department of Audit, Public Funds, 1999) indicates that while the average cost for county government in Wyoming was \$559 per person in 1998, the average cost for Teton and Sublette Counties was \$1,844 per person and \$1,659 per person respectively. These two counties had the highest average cost per person of any county in the state in 1998. They also had the highest proportion of rural residents of any county in the state (Teton 58.7 percent, Sublette 54.6 percent).

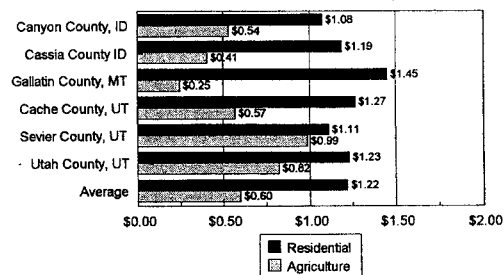
The combination of rapid population growth, loss of agricultural land, and higher costs for community services in Teton and Sublette Counties and elsewhere in the Rocky Mountain region has raised concerns that other counties in Wyoming may be facing similar situations in the future. These concerns relate to the potential change in the social structure of local communities, the loss of agriculture as an economic base, the loss of open space on private land, and increased cost of community services. As a result of these concerns, there has been increased interest in costs of community services studies in Wyoming. Cost of community services studies typically compare the costs and revenues to county governments and public schools for agricultural land with other types of land use such as residential development.

Previous Research

The American Farmland Trust (AFT) has been a leader in the development of cost of community services studies. AFT (1999) reports that more than 58 communities have

been studied over the past decade. Six of these communities were in the Rocky Mountain region. These six include Canyon and Cassia Counties in Idaho, Gallatin County in Montana, Cache, Sevier, and Utah Counties in Utah. Figure 1 compares the results from the six studies conducted in the Rocky Mountain region in terms of the ratio of cost of community services per dollar of revenue for county government and public schools in the six counties. Although there is substantial variation, in all cases the cost of community services exceeds revenues for residential land use. On average, residential development cost county government and public schools \$1.22 for every \$1.00 of revenue. For agriculture production, in all cases the cost of community services is less than revenue. On average, agricultural production cost county government and public schools \$.60 for every \$1.00 of revenue.

Figure 1.
Cost of Community Services Per Dollar of Revenue
For County Government and Public Schools



Methodology

This analysis differs from the AFT methodology in that it used a statistical model that predicted county government revenues and expenditures based on assessed valuation, acres of agricultural land, rural population, urban population, and personal income. This model was used to allocate costs and revenues for county government between land use types. The time frame covered was 1993 to 1998. Data for the model came from the County Finance Report prepared for the Tax Reform 2000 Committee by the Wyoming Department of Audit (1999). A statistical model was used because it was felt that it allowed greater flexibility in analysis, could be used to make projects and forecasts, and was somewhat less arbitrary in the allocation of costs than the AFT approach.

The effects of land use on school district revenues and expenditures were also considered in the analysis. School district revenues were allocated by land use type based on the source of the funds. School district expenditures were considered a residential expense. Rural residential school expenditures were based on the proportion of the population that was living in rural areas with an adjustment for higher transportation costs. The data for public schools came from Statistical Report Series No. 3: Wyoming Public Schools Fund Accounting and Reporting (1992-93 through 1997-98) from the Wyoming Department of Education. The analysis focuses on comparing the costs and revenues to county government and school districts from agricultural production with that for rural residential development on a statewide basis.

Results

Agricultural Production

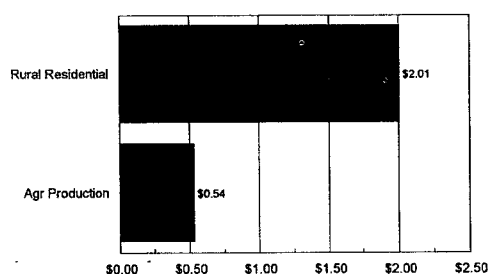
The results indicate that total county government revenue from agricultural production in Wyoming has averaged \$20.6 million per year between 1993 and 1998 (Table 1). This represents an average of \$0.80 per acre. On the expenditure side, the total cost of agricultural production to county government in Wyoming has averaged \$20.1 million between 1993 and 1998 or an about \$0.79 per acre. These results indicate that agricultural production is close to a break-even proposition for county government in Wyoming with revenues slightly exceeding costs on average. However, agricultural production also pays taxes to support local school districts. Between 1993 and 1998, total school district revenue from agricultural production has averaged \$16.7 million per year or about of \$0.65 per acre (Table 1). On the expenditure side, since school district expenditures are considered a residential cost, agricultural production does not directly increase school costs. Combining county government and school district indicates that agricultural production in Wyoming has averaged \$37.3 million per year in total revenue between 1993 and 1998 or about \$1.45 per acre. At the same time it has cost county government and school districts \$20.1 million per year or about \$0.79 per acre. These results indicate that agricultural production costs county government and school districts in Wyoming about \$0.54 for every \$1.00 of revenue (Figure 2).

Rural Residential Development

For rural residential development, total county government revenue in Wyoming has averaged \$33.7 million per year between 1993 and 1998 (Table 1). This represents an average of \$246.49 per rural resident. The total cost of rural residential development to county government has averaged \$42.3 million per year between 1993 and 1998 or about \$309.30 per rural resident. These results indicate that rural residential development represents a net loss to county government in Wyoming with costs exceeding revenues by 25 percent on average. Rural residential development also pays taxes to support school districts. Between 1993 and 1998, total school district revenue from rural residential development has average \$28.8 million per year or about \$209.79 per rural resident (Table 1). On the expenditure side, the total cost of rural residential development to school districts has averaged \$83.3 million or about \$608.26 per rural resident.

Combining county government and school districts indicates that rural residential development in Wyoming has averaged \$62.5 million per year in revenue between 1993 and 1998 or about \$456.27 per rural resident. At the same time, it has cost county government and school districts \$125.7 million per year or about \$917.56 per rural resident. These results indicate that rural residential development costs county government and schools in Wyoming about \$2.01 for every dollar of revenue (Figure 2).

Figure 2.
Cost of Rural Community Services Per Dollar of Revenue
For Wyoming



Conversion of Agriculture Land

The Census of Agriculture indicates that the average size of an agricultural operation in Wyoming was 3,781 acres with an estimated market value of \$808,346 in 1997. If this operation were to be subdivided in 35-acre lots it would result in 108 new residential lots. Assuming an average household size of 2.59 people, these lots would house 280 new rural residents when developed. Based on the model estimates, the conversion of this agriculture operation to a rural residential development would increase county government revenue for an average county in Wyoming by \$65,053 per year. However, the conversion would increase county government costs for an average county in Wyoming by \$82,527 per year. As a result, county government would realize a net loss of -\$17,474 per year from the conversion. If this annual loss were capitalized at a 6 percent rate it would mean that up to \$291,233 could be paid to retain the operation in agricultural production. While this amount would not be enough to purchase the operation outright, it might be enough to buy at least a portion of the development rights for the land. By selling the development rights the landowner would give up future rights

rights to develop the land for other uses and agree to retain the land in agricultural use. In return the landowner would be compensated for the loss of income from development.

Summary and Conclusions

The results indicate that on average agricultural production in Wyoming more than pays for itself in terms of both county government and school district costs. The estimated cost-revenue ratio for agricultural production in Wyoming is comparable to the results found in other parts of the Rocky Mountain region.

The results also indicate that on average rural residential development in Wyoming does not pay for itself in terms of either county government or school district costs. Revenues are higher for rural residential development, but the higher costs of rural residential development more than offset this difference. The estimated cost-revenue ratio for Wyoming is somewhat higher than those reported for other parts of the Rocky Mountain region. Part of this difference may be explained by the fact that the other studies did not differentiate between urban and rural residential land use as was done in this study. Presumably rural residences represent higher costs to county government and school districts than urban residences. As a result the cost-revenue ratio for rural residences would be higher than that for the combined urban and rural residences.

Finally, the results indicate that the conversion of a typical agricultural operation to a rural residential development results in a net loss in revenue for an average county in Wyoming. This suggests that it may be worthwhile to consider purchasing the development rights to the land in order to retain it in agricultural production.

It is important to note that the results above are only averages and are not representative of any specific development in Wyoming. The results for a specific development could vary substantially depending on the number of school children, the assessed valuation of the properties, and the level of services provided.

The analysis also does not consider the interrelationship between land uses. For example, if a residential development provides housing for workers that are necessary for local businesses to operate, then the combined revenues from the residential development and the business operations to county government and school districts may in some cases cover the costs. One advantage of using the statistical model for the analysis is that it provides the flexibility to evaluate such alternative scenarios.

REFERENCES

American Farmland Trust. Cost of Community Services Studies. American Farmland Trust Information Center. WWW.farmland.org. August 1999.

U.S. Department of Agriculture. 1997 Census of Agriculture, Wyoming State and County Data. Volume 1, Part 50, March 1999.

U.S. Department of Commerce. 1992 Census of Agriculture, Wyoming State and County Data. Volume 1, Part 50, June 1994.

Wyoming Department of Audit, Public Funds. Cost of Maintaining County Government in Wyoming: July 1, 1997 – June 30, 1998.

Wyoming Department of Audit, Public Funds Division, Local Government. County Finance Report. Prepared for The Tax Reform 2000 Committee. April 1999.

Wyoming Department of Education. Statistical Report No. 3, Wyoming Public Schools Fund Accounting and Reporting. 1992-93 through 1997-98.

Table 1. Cost of Rural Community Services in Wyoming

Agricultural Lands							
	1993	1994	1995	1996	1997	1998	Average
County Revenue	\$20,263,088	\$20,534,274	\$21,211,253	\$20,338,351	\$20,428,331	\$20,709,435	\$20,581,122
School Revenue	\$14,314,124	\$16,247,093	\$18,534,852	\$17,609,426	\$16,639,635	\$16,743,934	\$16,681,344
Total Revenue	\$34,577,213	\$36,781,367	\$39,746,104	\$37,947,777	\$37,068,966	\$37,453,369	\$37,262,466
County Costs	\$19,878,416	\$19,718,949	\$20,594,407	\$20,906,627	\$20,334,456	\$19,379,768	\$20,135,437
School Costs	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Costs	\$19,878,416	\$19,718,949	\$20,594,407	\$20,906,627	\$20,334,456	\$19,379,768	\$20,135,437
Cost/Revenue	0.575	0.536	0.518	0.551	0.549	0.517	0.540
Acres	25,827,428	25,254,439	25,298,075	25,802,491	25,850,998	25,738,438	
Per Acre County Rev	\$0.78	\$0.81	\$0.84	\$0.79	\$0.79	\$0.80	\$0.80
Per Acre School Rev	\$0.55	\$0.64	\$0.73	\$0.68	\$0.64	\$0.65	\$0.65
Per Acre Total Rev	\$1.34	\$1.46	\$1.57	\$1.47	\$1.43	\$1.46	\$1.45
Per Acre County Cost	\$0.77	\$0.78	\$0.81	\$0.81	\$0.79	\$0.75	\$0.79
Per Acre School Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Per Acre Total Cost	\$0.77	\$0.78	\$0.81	\$0.81	\$0.79	\$0.75	\$0.79
Rural Residential							
County Revenue	\$33,210,460	\$33,654,923	\$34,764,466	\$33,335,451	\$33,482,925	\$33,942,005	\$33,731,705
School Revenue	\$21,402,231	\$24,780,057	\$28,865,582	\$32,033,165	\$31,885,399	\$33,585,869	\$28,759,381
Total Revenue	\$54,612,690	\$58,434,981	\$63,630,028	\$65,368,616	\$65,372,324	\$67,527,875	\$62,491,085
County Costs	\$41,787,810	\$41,452,582	\$43,292,943	\$43,949,284	\$42,746,483	\$40,739,566	\$42,328,112
School Costs	\$72,225,169	\$62,838,248	\$87,144,046	\$86,361,180	\$97,458,819	\$94,077,201	\$83,350,777
Total Costs	\$114,012,980	\$104,290,830	\$130,436,989	\$130,310,464	\$140,205,302	\$134,816,767	\$125,678,889
Cost/Revenue	2.088	1.785	2.050	1.993	2.145	1.996	2.011
Rural Population	133,636	135,758	137,483	138,001	137,925	138,357	
Per Capita County Rev	\$248.51	\$247.90	\$252.86	\$241.56	\$242.76	\$246.32	\$246.49
Per Capita School Rev	\$160.15	\$182.53	\$209.96	\$232.12	\$231.21	\$242.75	\$209.79
Total Revenue	\$408.67	\$430.43	\$462.82	\$473.68	\$473.97	\$489.07	\$456.27
Per Capita County Cost	\$312.70	\$305.34	\$314.90	\$318.47	\$309.93	\$294.45	\$309.30
Per Capita School Cost	\$540.46	\$462.87	\$633.85	\$625.80	\$706.61	\$679.96	\$608.26
Total Cost	\$853.16	\$768.21	\$948.75	\$944.27	\$1,016.53	\$974.41	\$917.56

Oct 2, 2000

To Whom It May Concern:

As a life long resident of Durak, Montana, Lincoln County, my concern is that I cannot support myself or my family because of the lack of work in our state. I do not want a handout from the government, but I do want to work.

Please let our local Forest Service or State Foresters dictate how our forest are run, not the higher up in Washington DC. We need to manage our forests, not neglect them, not abuse them.

Thank you

Rosetta West
136 Riverside Dr.
Durak, MT 59917